

I-COMMAND TM

User's Guide



EVINRUDE[®]
Johnson[®]
GENUINE PARTS



IMPORTANT: This User's Guide outlines the functionality and usage of the *I-Command*™ Integrated Performance System. Before using the *I-Command* Digital gauge, first read and understand ALL of the supplied product literature, as well as the boat's user's guide and outboard's operator's guide. This User's Guide should be stored onboard for reference.

The photographs, illustrations, and display screens used in this Guide might not depict actual models, figures, data fields, equipment, or software versions, but are intended as representative views for reference only. The continuing accuracy of this Guide cannot be guaranteed.

† NMEA 2000 is a registered trademark of the National Marine Electronics Association or its subsidiaries.

The following trademarks are the property of Bombardier Recreational Products Inc. or its affiliates.

Evinrude® *E-TEC*™

I-Command™

Johnson®

S.A.F.E.™ (Speed Adjusting Failsafe Electronics)

BRP US Inc. / Outboard Engines Division

After Sales Support

P.O. Box 597

Sturtevant, WI 53177

About This Guide

IMPORTANT: Read this User's Guide carefully before using the *I-Command* Digital gauge. This User's Guide should be kept onboard at all times during operation.

Need Assistance?

For any questions regarding the boat or outboard operation, please refer to the boat's user's guide, or outboard's operator's guide for support information.

For questions or problems regarding the *I-Command* Digital gauge, contact your dealer.

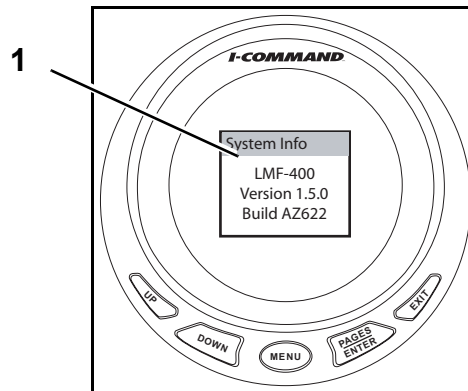
Dealers with questions should contact BRP Parts and Accessories Technical Help.



WARNING

For your safety and the safety of others, follow all safety warnings and recommendations supplied with the boat and outboard. Do not disregard any of the safety precautions and instructions.

IMPORTANT: This guide was written for 3.5 inch *I-Command* Digital gauges with software version 1.5.0. Gauges with other software versions may have features not documented in this guide. To view the gauge software version, refer to "System Information" on page 106.



1. *I-Command* Digital gauge software version information

TABLE OF CONTENTS

Installation

Description	5
Instruments	6
Network Devices	9
Network Setup	14

Basic Setup and Operation

Power Up	16
Boat Setup	17
Engine Data	19
Information Displays	20
Screen Settings	22
Change Units	26

Customizing Displays

Display Fuel Economy	30
Add New Page	32
Customizing Displays	38
Lock Pages	42
Accessing a Locked Page	44
Removing Pages	46
Page Scrolling	48
Pop-Ups	50
Stay-on Time	52
Sleep Mode	54

Advanced Setup and Operation

Configure Fluid Level Sensor	58
Fuel and Fluid Level Sensor Calibration	61
Fuel Management	64
Configure Sensors	70
Change Ranges	74
Winterize	76
Audio Settings	79
Reset Values	80
Sonar Alarms	82

Troubleshooting

Gauge Flashes Four Dashes	86
Engine Warnings	87
<i>Evinrude E-TEC</i> Engine Warnings	88
Network Troubleshooting Chart	90

Updating Gauge Software

Software Updates	94
------------------------	----

Reference Information

Abbreviation Tables	102
Abbreviations Key	104
System Information	106

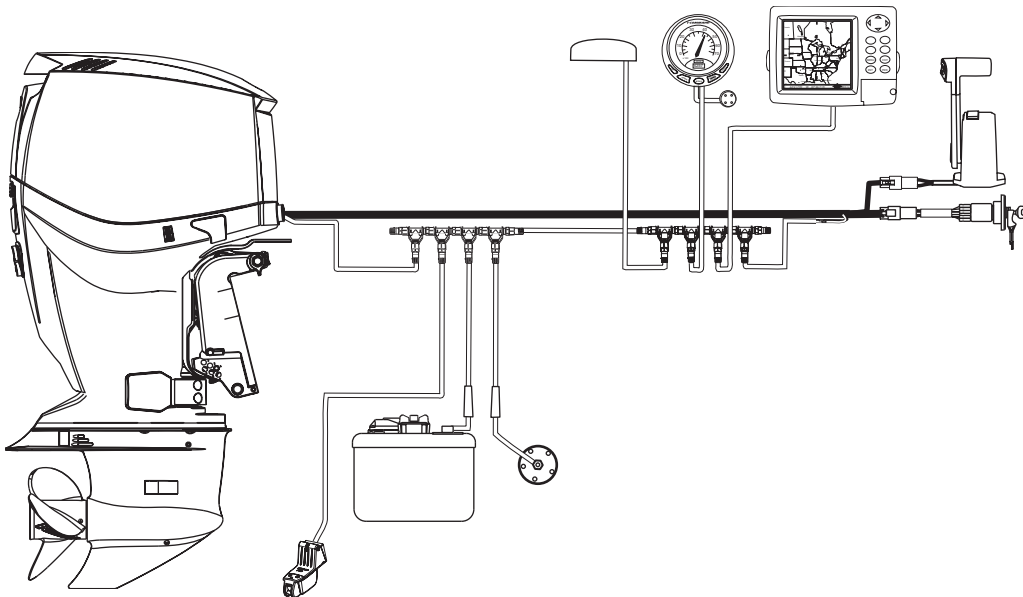
Product Warranty

Warranty Statement	107
--------------------------	-----

Installation

Description

The *I-Command*™ Digital Integrated Performance System uses “plug and play” networking technology based on NMEA 2000⁺ data communications standards (National Marine Electronics Association). These standards provide communications through a serial data network utilizing a Controller Area Network (CAN) integrated circuit (IC). This network operates at 250 kb/second and allows multiple electronic devices to be connected together on a common channel for easy information sharing. Multiple digital displays can be used to monitor and broadcast equipment and engine data.



Instruments

Spacing of Instruments

The minimum distances between instruments on a panel should be as follows:

- 3 13/16 (112 mm) center to center for 3 1/2 in. instruments
- 3 1/4 in. (95.5 mm) center to center for 3 1/2 in. instruments to 2 in. instruments
- 2 5/8 in. (77 mm) center to center for 2 in. instruments

Panel Thickness

Instruments can be mounted in panels up to 1 in. thick.

Hole Sizes

IMPORTANT: Check space behind panel to be sure adequate clearance for instruments exists before drilling panel.

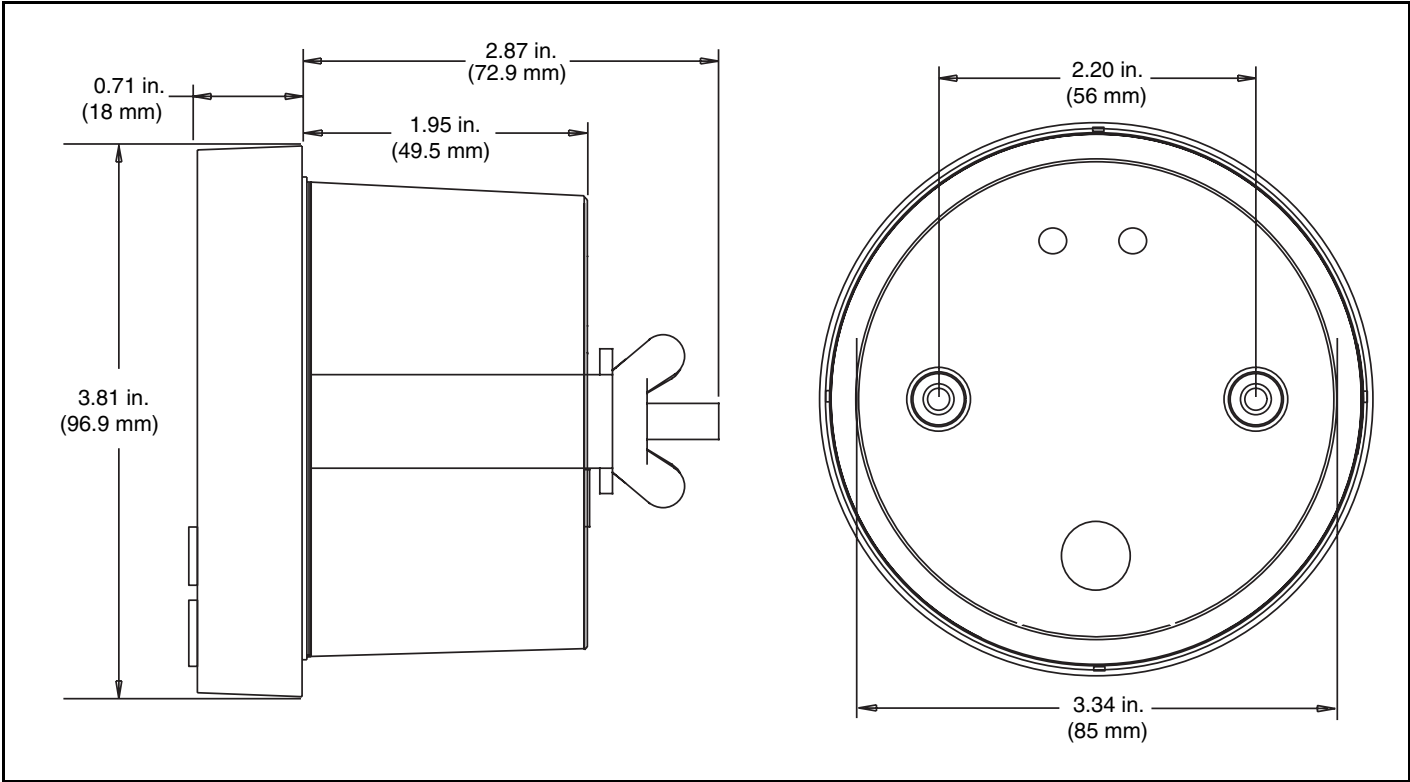
3 1/2 in. Multifunction Gauge

Cut 3 3/8 in. (99 mm) diameter hole in panel for 3 1/2 in. instruments.

Fastening to Panel

Insert instrument into panel hole. Install bracket and tighten nuts finger tight.

Gauge Dimensions



Warning Horn

Connect the yellow wire from the instrument to the black wire of the warning horn. Connect the blue wire from the instrument to the red wire of the warning horn. Each instrument should be installed with a warning horn. Mount each warning horn in a protected area and so horn is audible for operator.

Navigation Lights (Optional)

Connecting the light wiring for the *I-Command* instrument to the boat's navigation lights will provide instrument lighting if the instrument backlight setting is set to lowest setting and the boat's navigation lights are turned ON.

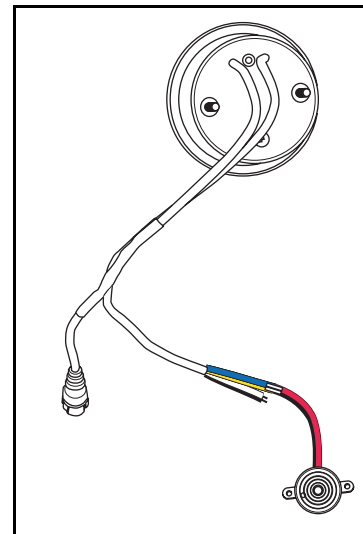
If desired, connect the white wire from the instrument to the switched positive (B+) of the boat's navigation lights and the black wire from the instrument to ground (GND).

Single Engine Power Supply Harness:

Connect the red wire of the power supply harness to the purple switched B+ accessory wire of the ignition and trim/tilt wire harness. Connect the black wire of the power harness to the black ground wire of the ignition and trim/tilt harness.

Multiple Engine Power Supply Harness:

Connect the purple wire(s) of the power supply harness to the purple switched B+ accessory wire of the ignition and trim/tilt wire harness(s). Connect the black wire of the power harness to a black ground wire of the ignition and trim/tilt harness. (Optional: connect the red wire of the power harness to a switched B+ power supply of the boat.)



Warning Horn

Network Devices

Also see the “Network Specification Diagram” on page 10.

Buss Length

The distance between any two points on the network must not exceed 100 meters (328 ft.).

Measure the distance from the Tee-connector to the last device at each end of the network. Device cable lengths at the ends of the network must be included in the total network buss length calculation.

Devices

Devices may be installed in any order. When installing temperature, pressure and fluid level sensors, install one device at a time. Configure the device, see “Advanced Setup and Operation” on page 57, then repeat this process for each sensor device being installed.

Device Cable Lengths

- Must not exceed 6 meters (19 ft.) for single device cable lengths
- Must not exceed 78 meters (256 ft.) for total device cable lengths

Maximum Number of Devices

A maximum of 50 devices can be attached to a network.

IMPORTANT: There should be no “open” or unused network device connectors. Remove unused network device connectors.

or



Device Net-style Connectors

I-Command and *NMEA 2000* networks use *DeviceNet* Micro-C type connectors. These connectors use 12 mm threaded locking rings and are water-proof when assembled properly. All *DeviceNet* Micro-C connectors are compatible with the *I-Command* red network connectors.

Connectors with slightly different appearances supplied with *I-Command* or *NMEA 2000* devices should NOT affect network operation. Always check pin and socket and locking ring configurations when installing connectors on a network.

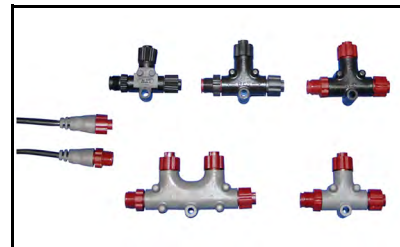
Use the *I-Command Product Guide*, P/N 764677, or a current *Accessories Parts Catalog* (2008 or newer) to look up part numbers for *I-Command* network connectors. See your dealer.

Connector Installation

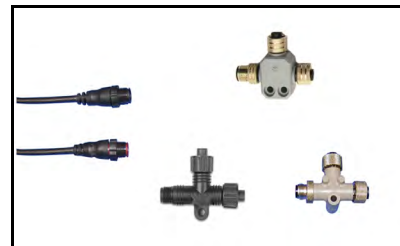
Connectors have two configurations – Male (pins) and Female (sockets). Lubricate all connector gaskets with *Electrical Grease* before assembly.

Connectors should assemble easily. Do not force connectors or locking rings together.

If connectors do not match, an adapter cable may be available. See your dealer.



I-Command Network Connectors
(DeviceNet-style Connectors)



DeviceNet Micro-C connectors offered by
other suppliers.

Terminating Resistors

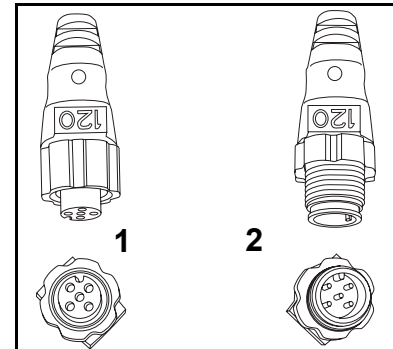
Terminating resistors are required for accurate network transmissions. Networks must be assembled with one terminator installed at each end of the *I-Command* network. See the “Network Specification Diagram” on page 10.

Tee-Connectors and Buss Cables

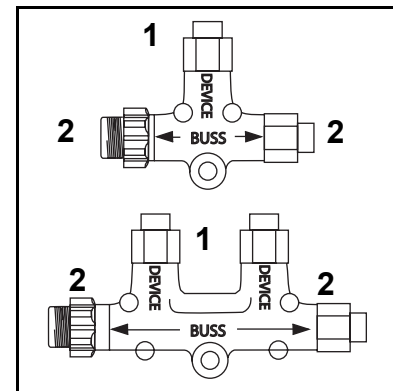
Tee-connectors provide each device access to the network. Single Tee-connectors have two buss connectors and one device connector. Double Tee-connectors have two buss connectors and two device connectors. Network devices must be connected to the device connector of the Tee-connector.

Tee-connectors can be installed at the end of a network. Connect a network buss cable to one side and a terminator into the other.

Multiple Tee-connectors can be installed in the middle or the end of a network. Use network buss cables to connect Tee-connectors or multiple Tee-connectors. See the “Network Specification Diagram” on page 10.



1. Female terminating resistor (sockets)
2. Male terminating resistor (pins)



1. Device connector
2. Buss connector

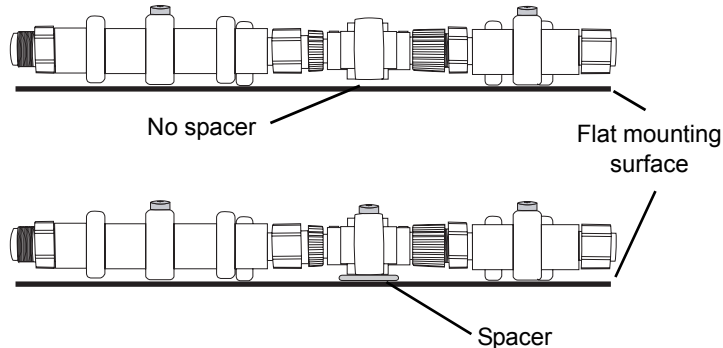
Mounting Connectors

When mounting connectors, pay attention to connector alignment. Some connectors may have different mounting boss dimensions. If necessary, use an appropriate spacer behind the connector.

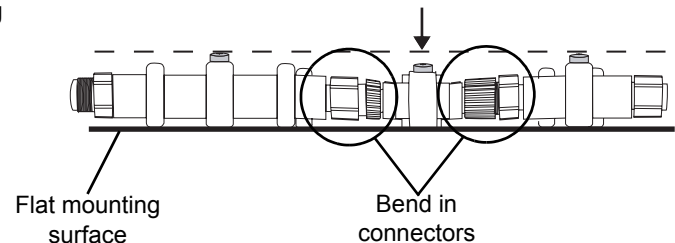
Mount connectors to a flat mounting surface with screws. Tighten screws by hand. Using a power driver can over tighten screws and damage connectors.

Incorrect connector mounting can bend and damage the connectors resulting in a broken network connection.

CORRECT INSTALLATION



INCORRECT INSTALLATION



Network Setup

IMPORTANT: Set “ENGINE OPTIONS” on *Evinrude E-TEC* outboards before power is applied to the *I-Command* Network.

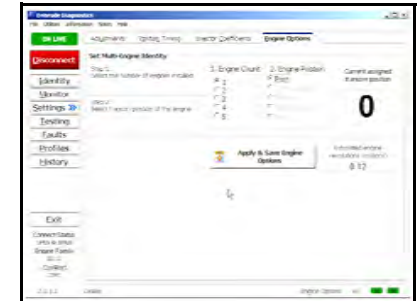
Engine Options

Use *Evinrude Diagnostics* software to set “ENGINE OPTIONS”.

Settings include:

- Set multi engine identity (engine count and engine position)
- Calibrate trim sensor
- Water pressure transducer (ONLY if equipped with water pressure transducer that is installed on engine block, P/N 5006214)

See your dealer if set “ENGINE OPTIONS” has not been completed.



Evinrude Diagnostics software, set engine options

Basic Setup and Operation

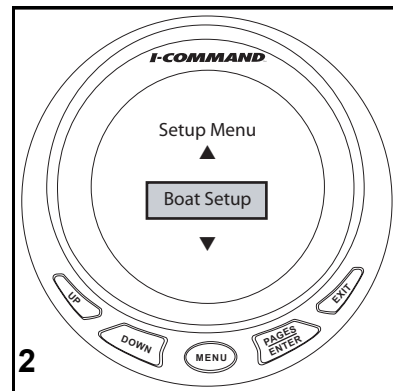
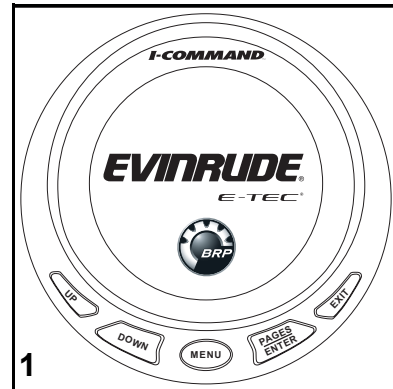
Power Up

The displays and settings in this digital gauge are controlled by a five-button keypad. The buttons are:

- UP and DOWN** — Use to scroll through and select menu items
- MENU** — Use to open basic menu to set up display pages
- PAGES / ENTER** — Use to scroll forward through pages, and to select menu items
- EXIT** — Use to scroll backward through pages, close menus, and to return to a previous page

Turn the ignition key to the ON position. Starting the engine is not required. The *Evinrude E-TEC* welcome screen will appear or the Boat Setup menu will appear.

1. When the *Evinrude E-TEC* welcome screen appears and the gauge continues to display a data page then the boat setup has already been completed. Go to “Information Displays” on page 20.
2. If the Boat setup screen is visible go to Boat Setup.



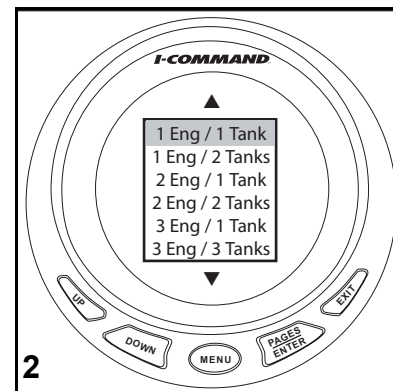
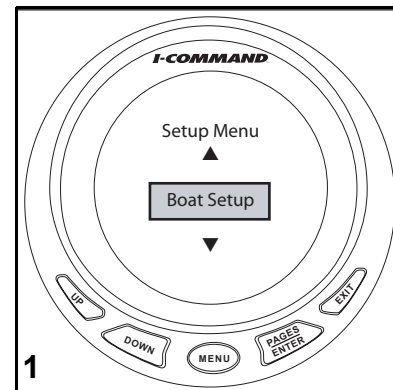
Boat Setup

Engine and Fuel Tank Configuration

When the *I-Command* Digital gauge powers up for the first time, the screen will show the Boat Setup menu.

Boat Setup must be complete before proceeding.

1. Press ENTER. Press the DOWN button to select the engine and tank configuration for the boat.
2. Press ENTER to select configuration. The screen will then display Setting Fuel Tank Size.



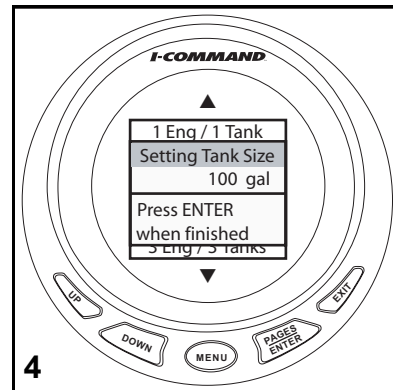
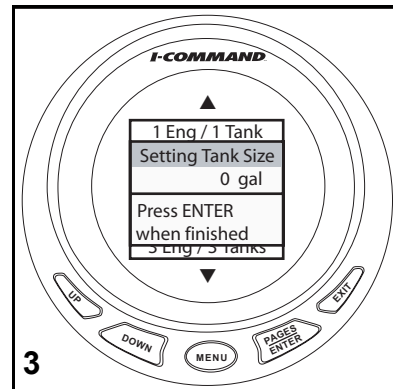
Setting Fuel Tank Size

3. Press and hold the UP button to enter the fuel tank capacity. Use the DOWN button if necessary to make additional adjustments.
4. Press ENTER to set the tank capacity. Repeat these steps for additional fuel tanks.

Press the EXIT button twice to return to the tachometer page.

IMPORTANT: For user's who prefer fuel capacity in LITERS – Enter fuel capacity in U.S. gallons BEFORE changing units to liters.

Boat Setup is complete. Proceed to Information Displays.

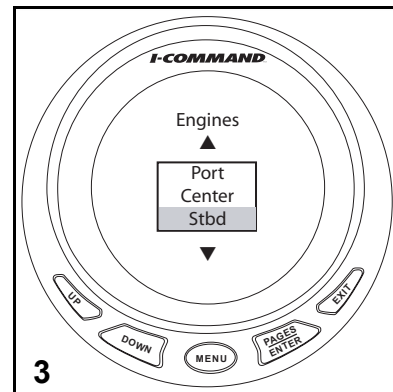
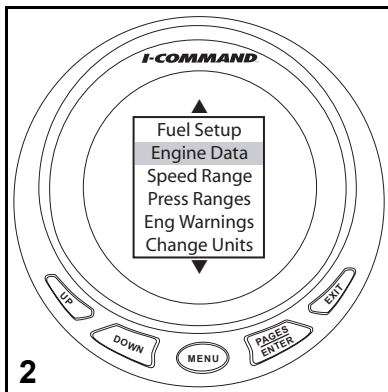
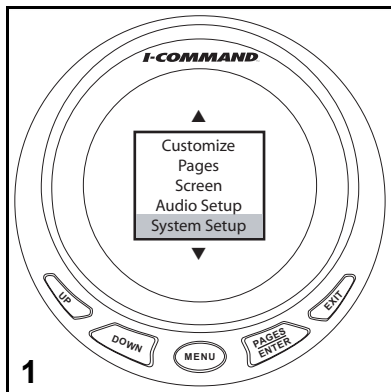


Engine Data

The *I-Command* system can monitor up to three engines. The ENGINE DATA option controls which engine is monitored. **Note:** This option will only display in multi-engine set-ups.

1. Press MENU. Use the UP or DOWN buttons and select SYSTEM SETUP.
Press ENTER.
2. Use the UP or DOWN buttons and select ENGINE DATA.
Press ENTER.
3. Use the UP or DOWN buttons to select choose PORT, CENTER, OR STARBOARD engine.
Press ENTER.

Repeat this process to assign each engine to its own gauge.



Information Displays

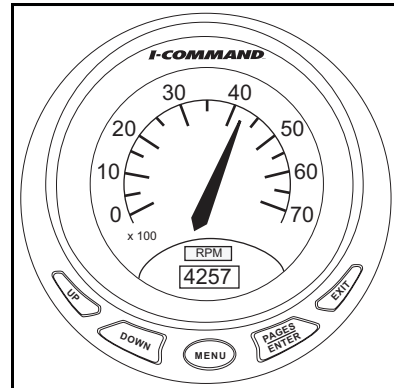
Pages are an essential part of the *I-Command* Digital gauge.

Press the ENTER button repeatedly to scroll through the factory default pages.

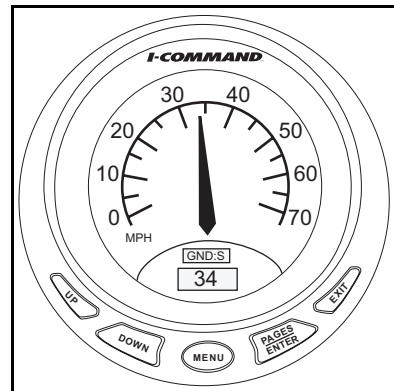
There are seven factory default pages:

- Tachometer - displays engine rpm
- Speedometer - displays ground speed (GND:S)
- Fuel Level - displays fuel level percent (FUL:L)
- Engine Trim - displays engine trim percent
- Battery Volts (Batt Volt) - displays battery voltage
- Engine temperature (Eng Temp) - displays engine operating temperature. in degrees Fahrenheit or Celsius. See “Change Units” on page 26 to customize this display.
- Fuel Flow - displays default fuel management information of ground speed, fuel remaining (Fuel Rem), and fuel level. See “Fuel Management Options” on page 66 to customize this display.

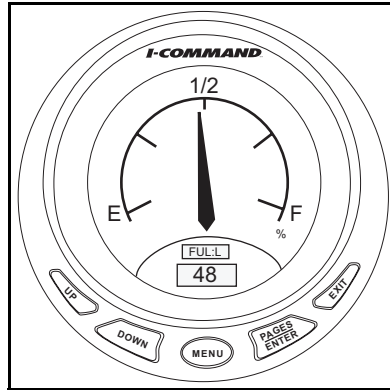
The *I-Command* gauges are ready for operation.



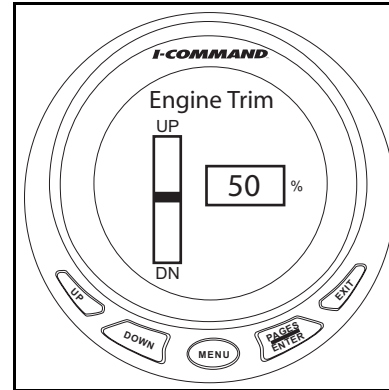
Tachometer



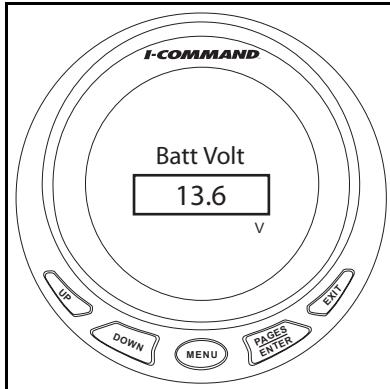
Speedometer



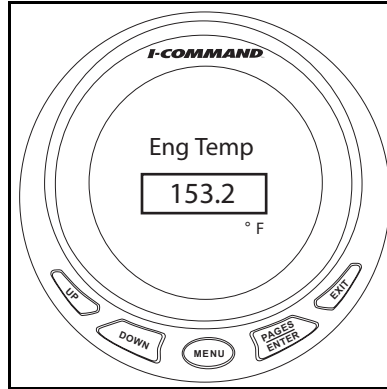
Fuel Level



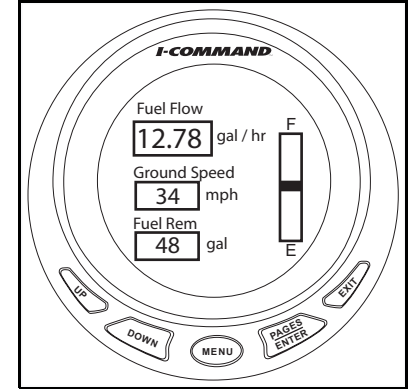
Engine Trim



Battery Voltage



Engine Temperature



Fuel Flow

Screen Settings

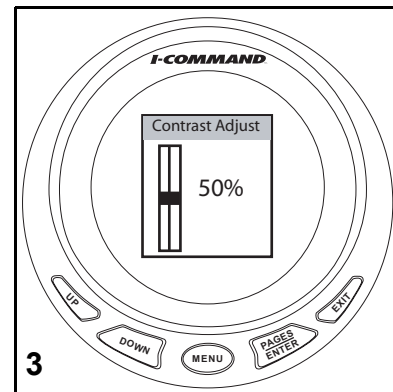
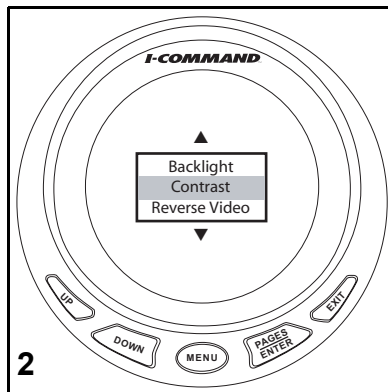
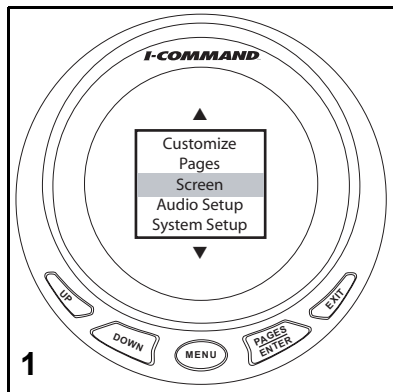
Change the screen settings to improve visibility.

1. Press MENU. Use UP or DOWN buttons to select SCREEN. Press ENTER.

- To change contrast, go to Step 2.
- To adjust backlight go to Step 4.
- To change video display go to Step 9.

Change Contrast

2. Use UP or DOWN buttons to select CONTRAST. Press ENTER.
3. Use UP button to darken or DOWN button to lighten contrast. Press ENTER when finished.

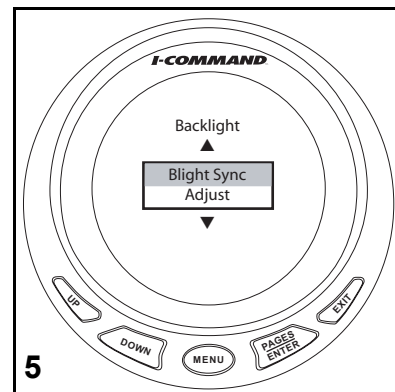
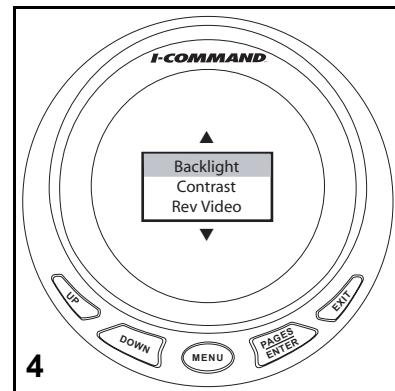


Adjust Backlight

4. Use UP or DOWN buttons to select BACKLIGHT.
Press ENTER.
5. Use the UP or DOWN buttons to select BLIGHT SYNC or ADJUST.
Press ENTER.

For backlight synchronization go to Step 6.

To adjust backlight brightness go to Step 7.



6. Use the UP or DOWN buttons to select OFF or ON.

Turn Backlight Sync ON to synchronize the lighting of all gauges.

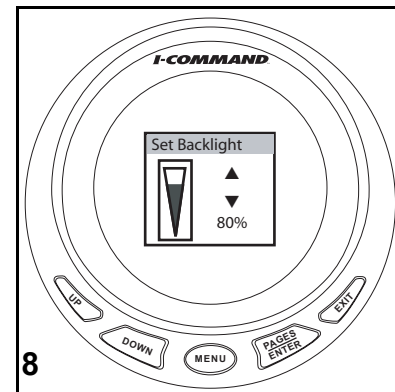
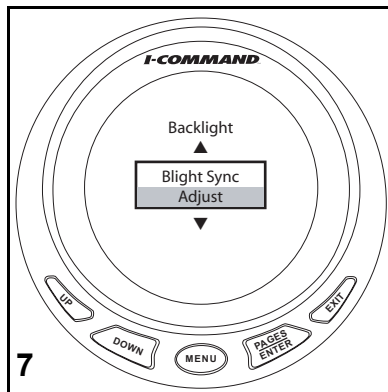
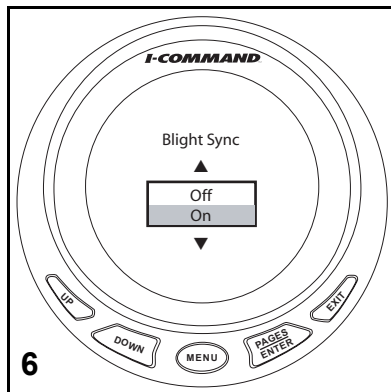
7. Use the UP or DOWN buttons to select ADJUST.

Press ENTER.

8. Use the UP button to brighten the backlight.

Use the DOWN button to dim the backlight.

Press EXIT when finished.



Reverse Video

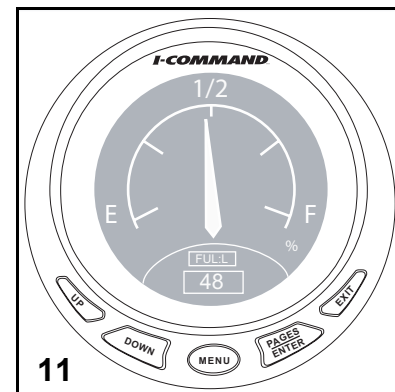
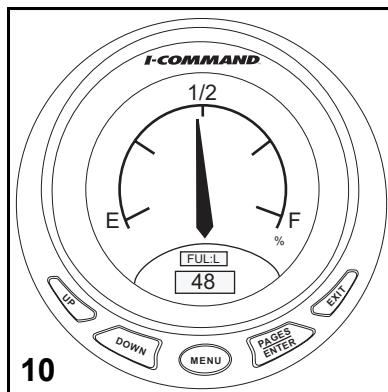
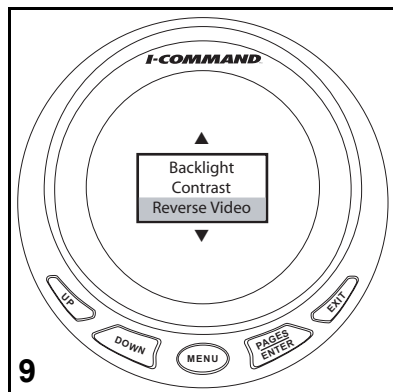
9. Use UP or DOWN buttons to select REVERSE VIDEO.

Press ENTER.

10. Press ENTER to toggle screen from dark values with light background;

11. or from light values with dark background.

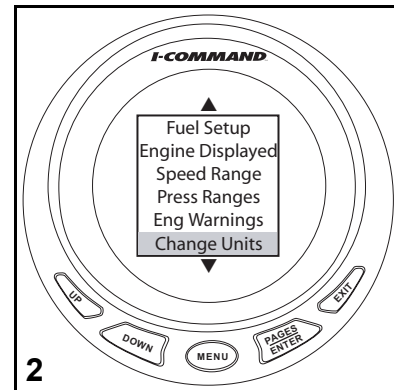
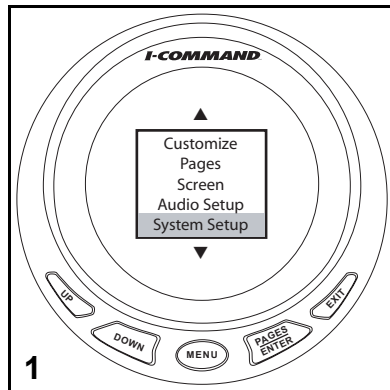
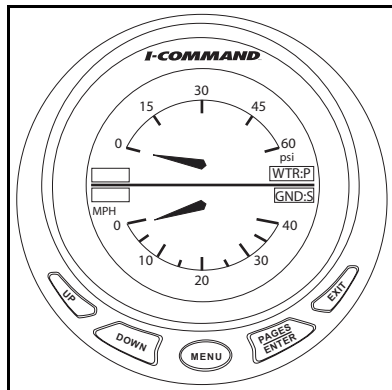
Press EXIT when finished.



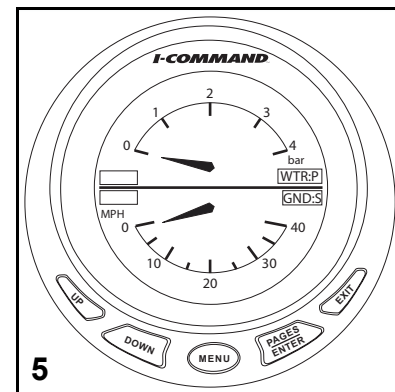
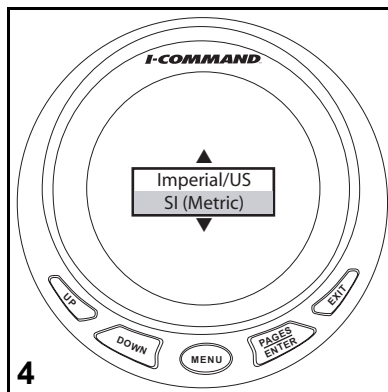
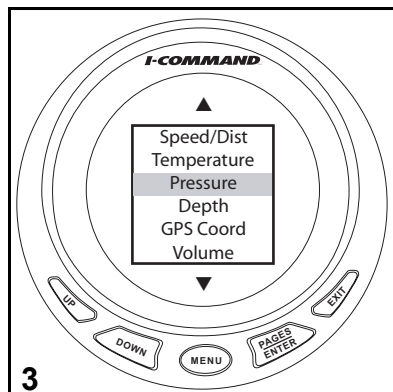
Change Units

This example will change the water pressure gauge to read from psi, to bar. Other units can be changed in the same manner.

1. Press MENU. Use the UP or DOWN buttons and select SYSTEM SETUP.
Press ENTER.
2. Use the UP or DOWN buttons and select CHANGE UNITS.
Press ENTER.



3. Use the UP or DOWN buttons and select PRESSURE.
4. Use the UP or DOWN buttons and select desired units.
Press ENTER.
5. Gauge will now display selected units.



This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Customizing Displays

Display Fuel Economy

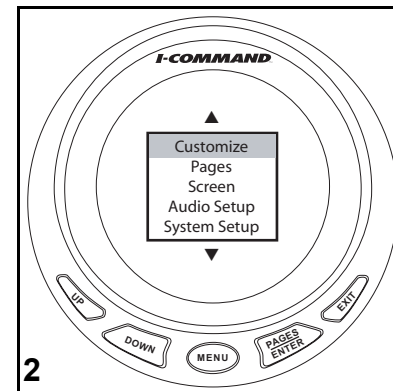
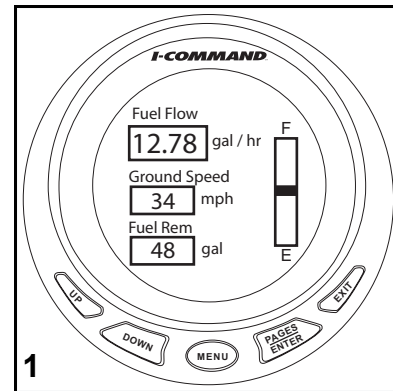
1. Press the ENTER button repeatedly to scroll to the Fuel Flow page.

The center data box is Ground Speed.

2. Press MENU.

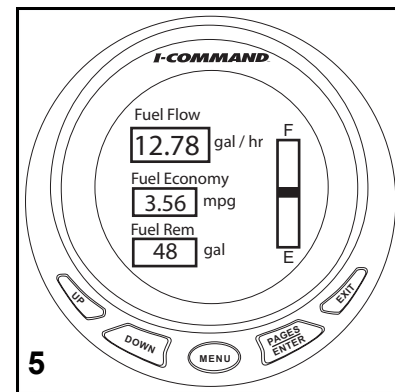
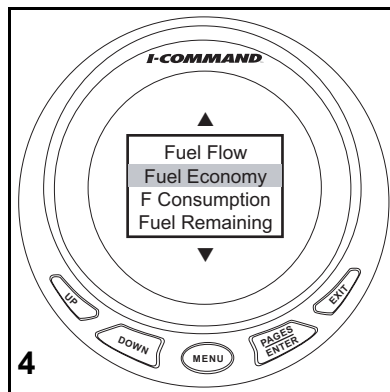
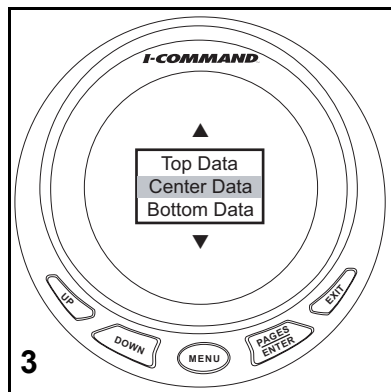
Use the UP or DOWN buttons to select CUSTOMIZE.

Press ENTER.



3. Use UP or DOWN buttons to select CENTER DATA.
Press ENTER.
4. Press UP or DOWN button to select FUEL ECONOMY.
Press ENTER.
5. Press EXIT twice to return to fuel manager page.

Fuel Economy (MPG) is now activated.



Add New Page

Page displays can be presented in analog or digital format as single, dual, or quad displays.

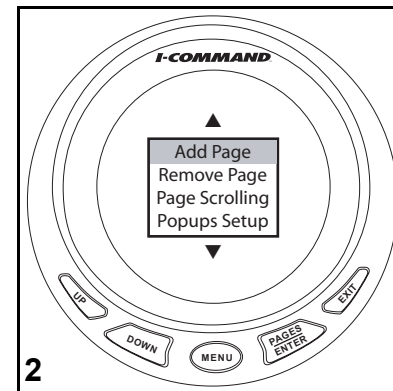
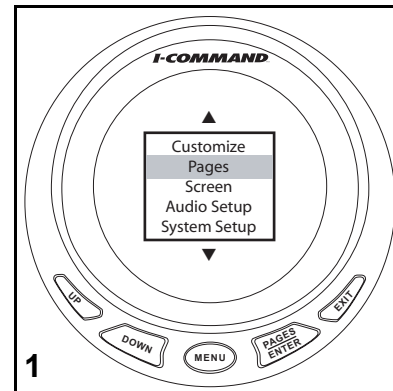
In addition to analog or digital gauge displays, seven other pages can be added. They are:

- Trim Tabs - requires sending unit
- GPS Position - requires GPS module
- Rudder - requires sending unit
- Clock - requires GPS module
- Fuel Manager (labeled as Fuel Flow, also a default page)
- Engine Trim (also a default page)
- Engine Diagnostics
- Synchronizer – displays RPM for up to three engines, allowing users to synchronize the engines for smoother performance.

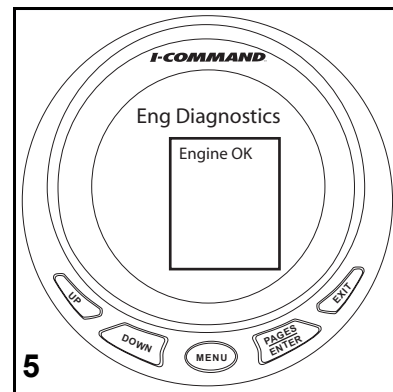
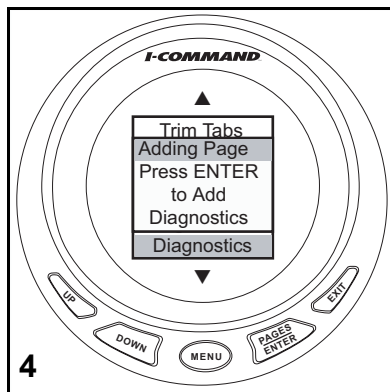
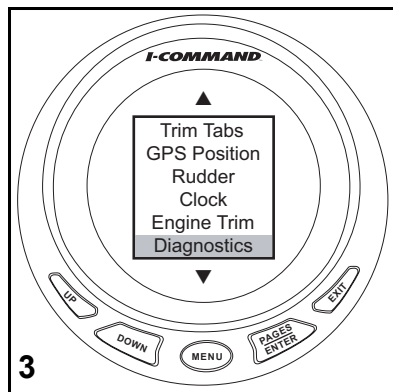
Note: Only supported in multi-engine setups.

This example will add an Engine Diagnostics page.

1. Press MENU.
Use UP or DOWN buttons to select PAGES.
Press ENTER.
2. Press ENTER to select ADD PAGE.



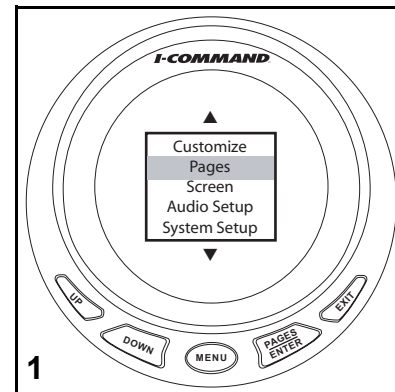
3. Use the UP or DOWN buttons to select Diagnostics.
Press ENTER.
4. Press ENTER again to confirm.
5. The Engine Diagnostic page will now display.



Add Analog Page

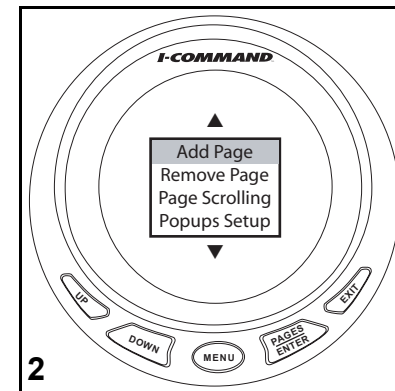
Analog page displays allow the following data combinations:

- Alt Voltage
- Atmospheric Pressure
- Battery Voltage
- Engine Temp
- Fluid Level
- Fuel Pressure
- Engine Oil Pressure
- Transmission Oil Pressure
- GPS Speed (speed over ground)
- Paddle Wheel Speed (speed over water)
- Pitot Speed
- Tachometer
- Temperature
- Engine Water Pressure
- Engine Boost Pressure



This example adds a dual analog gauge display. Single analog or quad analog displays may be added by selecting those options.

1. Press MENU.
Use UP or DOWN buttons to select PAGES.
Press ENTER.
2. Press ENTER to select ADD PAGE.

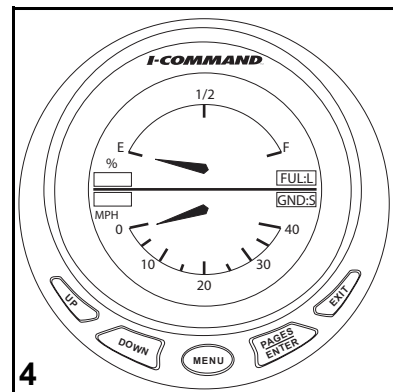
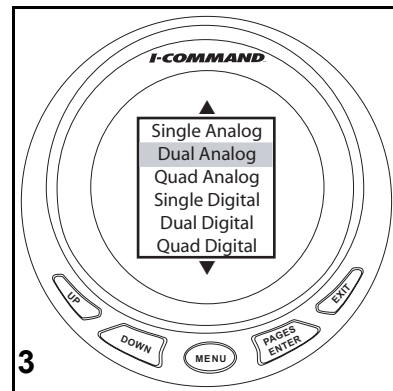


3. Press UP button to select DUAL ANALOG.
Press ENTER.

4. Press ENTER again to confirm.

The Dual Analog gauge will now display.

To change the items displayed on any single, dual or quad analog gauge, see “Customizing Displays” on page 38.



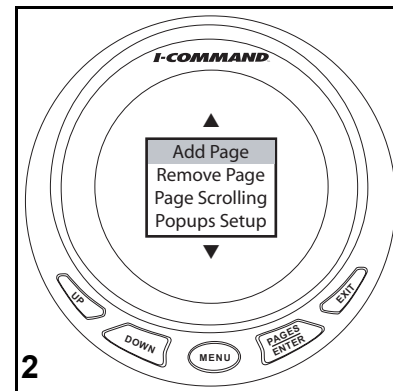
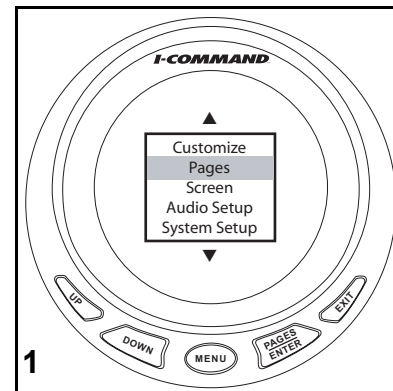
Add Digital Page

Digital page displays allow the following data combinations:

- Alt Voltage
- Atmospheric Pressure
- Battery Voltage
- Depth
- Engine Temperature
- Fuel Economy
- Fuel Flow
- Fuel Range
- Fuel Consumption
- Fuel Used
- Trip Fuel Used
- Seasonal Fuel Used
- Transmission Oil Pressure
- Fuel Remaining
- GPS Speed (speed over ground)
- Paddle Wheel Speed (speed over water)
- Pitot Speed
- Tachometer
- Temperature
- Total Engine Hours
- Throttle Percentage
- Engine Water Pressure
- Engine Oil Pressure
- Fuel Pressure
- Engine Boost Pressure
- Time

This example adds a quad digital gauge display. Single analog or dual digital displays may be added by selecting those options.

1. Press MENU.
Use UP or DOWN buttons to select PAGES.
Press ENTER.
2. Press ENTER to select ADD PAGE.

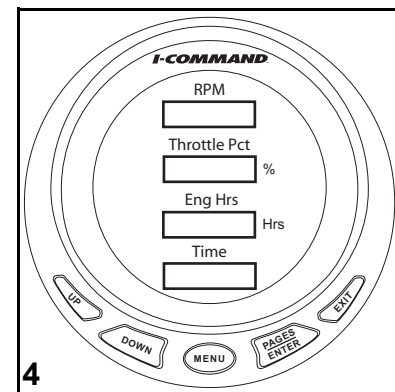
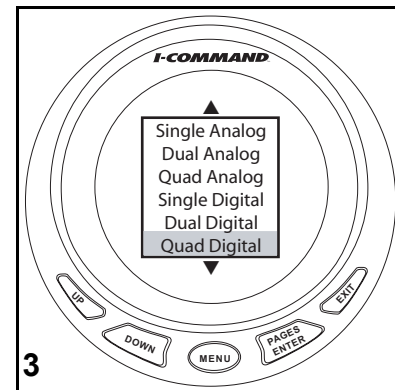


3. Use UP or DOWN buttons to select QUAD DIGITAL.
Press ENTER.

4. Press ENTER again to confirm.

The Quad Digital gauge will now display.

To change the items displayed on any single, dual or quad digital gauge, see
“Customizing Displays” on page 38.

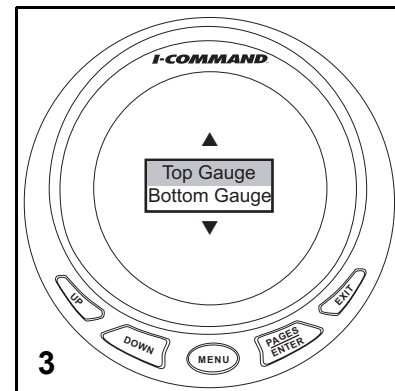
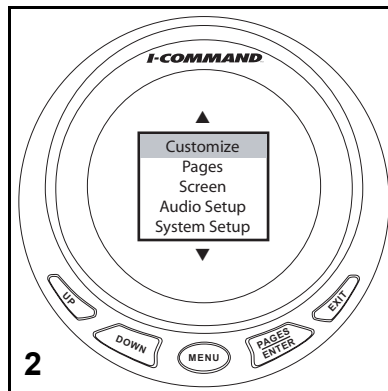
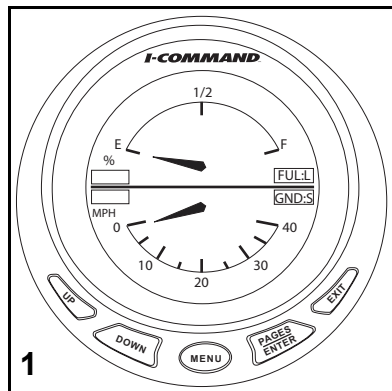


Customizing Displays

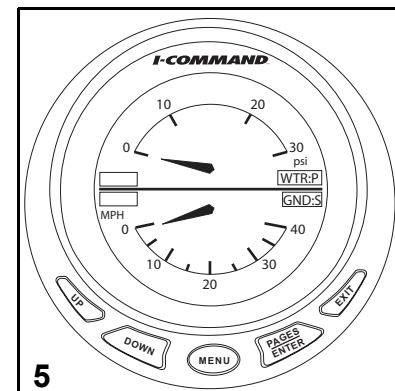
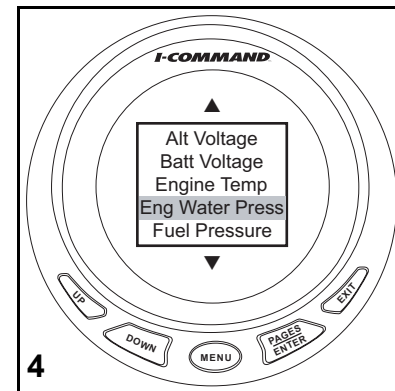
Changing Display Defaults

When adding pages, each single, dual or quad page has a default display. Use the CUSTOMIZE menu to change which items are displayed on a page.

1. Press ENTER multiple times to scroll to page to customize.
Press MENU.
2. Use UP or DOWN buttons to select CUSTOMIZE.
Press ENTER.
3. Use UP or DOWN buttons to select GAUGE (if analog), or DATA BOX (if digital).
Press ENTER.

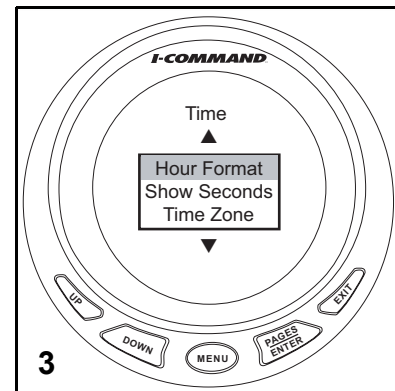
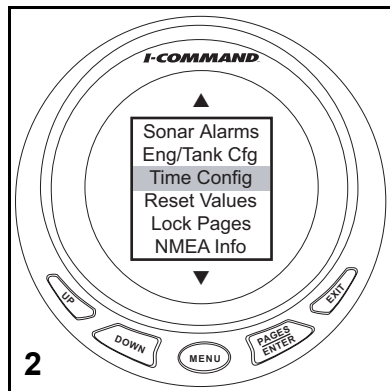
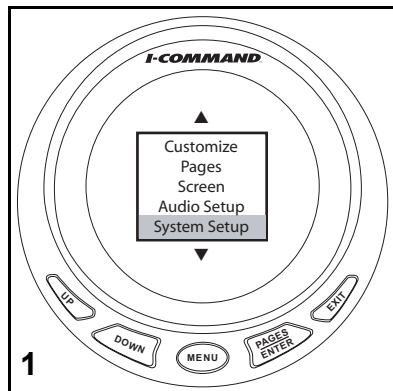


4. Use UP or DOWN buttons to select desired display item.
Press ENTER.
5. Press EXIT once to return to Step 3 and change remaining items.
Press EXIT multiple times to return to display.
Display change will now appear.

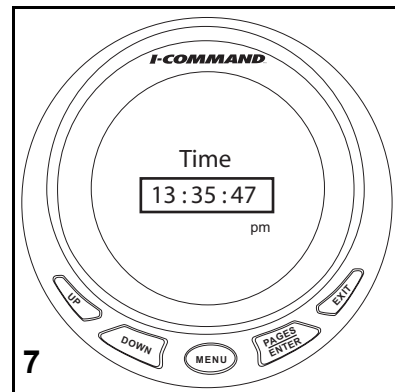
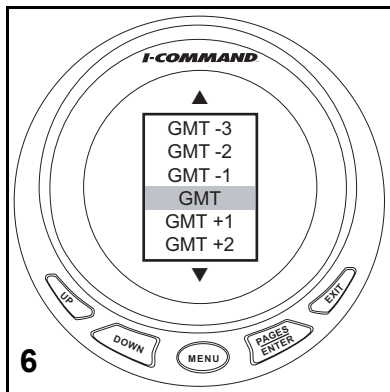
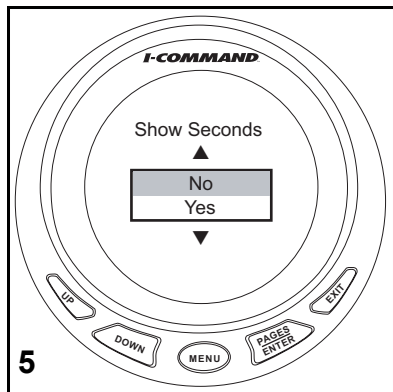
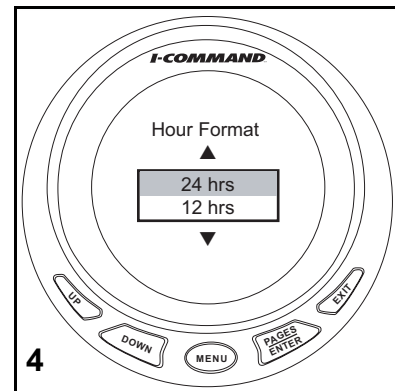


Configure Time Display

1. Press MENU.
Use UP or DOWN buttons to select SYSTEM SETUP.
Press ENTER.
2. Use UP or DOWN buttons to select TIME CONFIG.
Press ENTER.
3. Use UP or DOWN buttons to select:
HOUR FORMAT, go to Step 4.
SHOW SECONDS, go to Step 5.
TIME ZONE go to Step 6.



4. Use UP or DOWN buttons to select 12 or 24 hour display option.
Press ENTER.
5. Use UP or DOWN buttons to select YES or NO.
Press ENTER.
6. Use UP or DOWN buttons to select Time Zone.
Press ENTER.
7. Press EXIT multiple times to return to time display.



Lock Pages

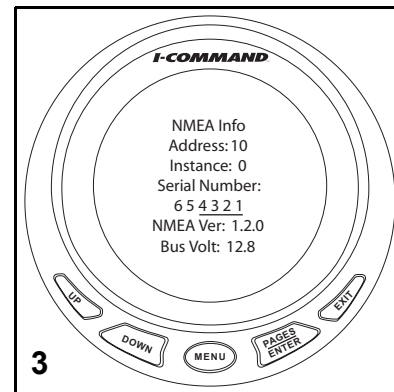
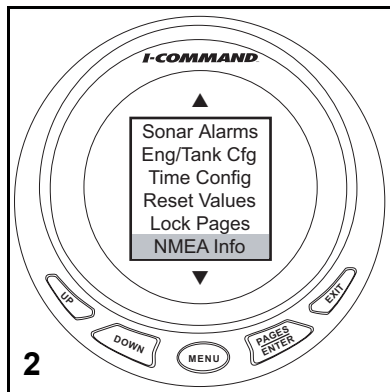
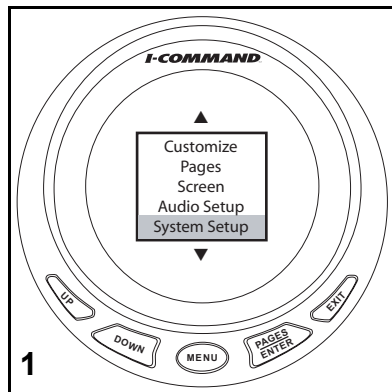
Viewing Pass Code

This feature prevents unauthorized users from changing select gauge settings. If you have the PASS CODE, skip to step 4.

1. Press MENU. Use UP or DOWN buttons to select SYSTEM SETUP. Press ENTER.
2. Select NMEA INFO and press ENTER.
3. The PASS CODE is the last four digits of the SERIAL NUMBER.

For easy reference, write gauge serial number here: _____

Press EXIT to return to the MENU.

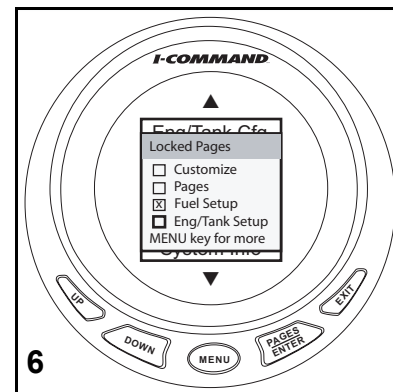
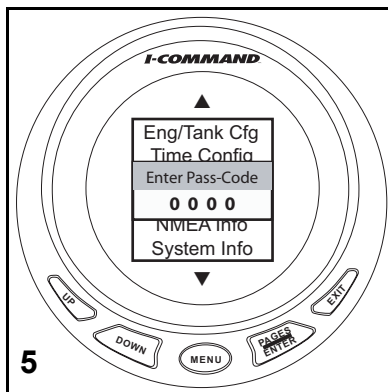
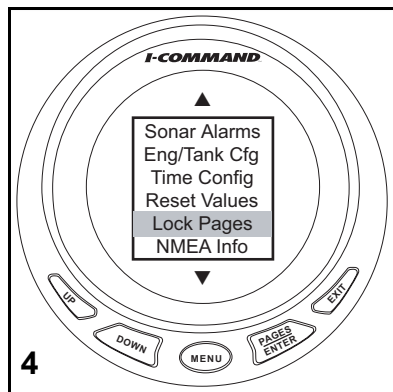


Lock Pages

4. Use the UP or DOWN buttons to select LOCK PAGES.
Press ENTER.

5. Use the UP or DOWN buttons to change the active digit.
Use the MENU button to select the next digit.
Press ENTER to submit PASS CODE.

6. Use the UP or DOWN buttons to scroll through the list. Press the MENU button to view the next list.
Press ENTER to select page(s) to be locked. An "x" will appear in the box when a page is selected.
Press EXIT when selection is complete.

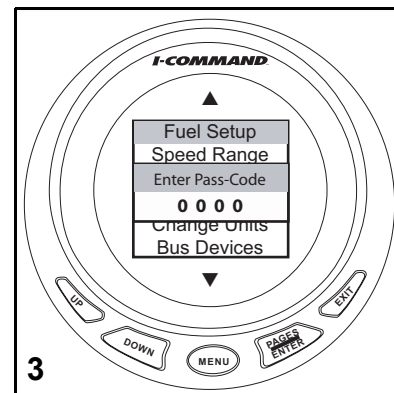
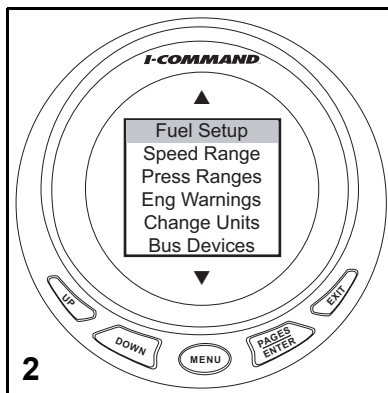
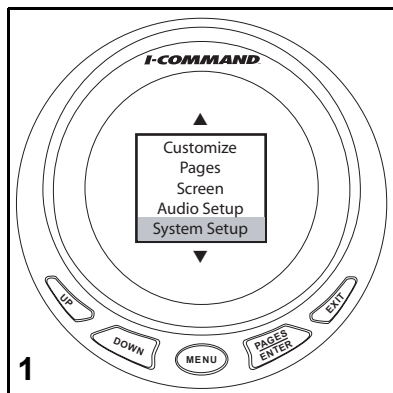


Accessing a Locked Page

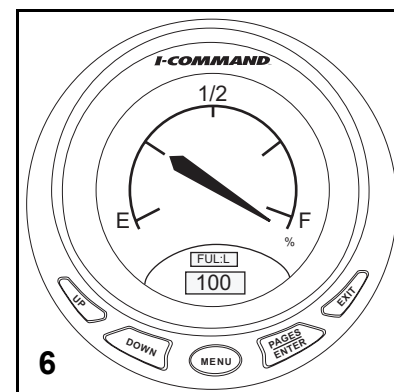
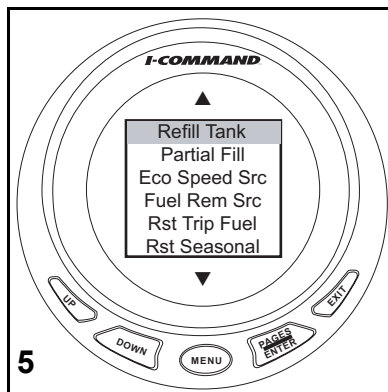
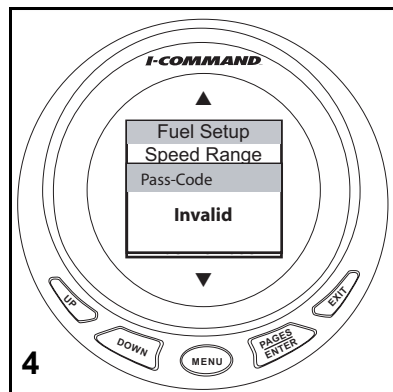
Locking pages prevents an unauthorized user from changing select gauge settings.

1. Press MENU.
Use UP or DOWN buttons to select SYSTEM SETUP.
2. Select desired page and press ENTER.
3. Enter the gauge PASS CODE.
Use the UP or DOWN buttons to change the active digit.
Use the MENU button to select the next digit.

Press ENTER to submit PASS CODE.

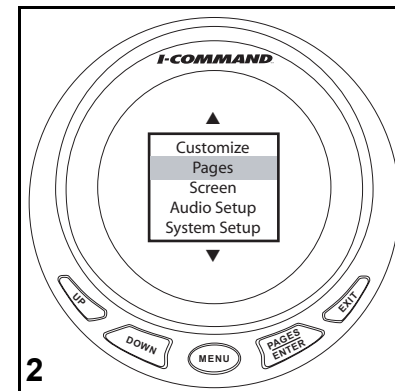
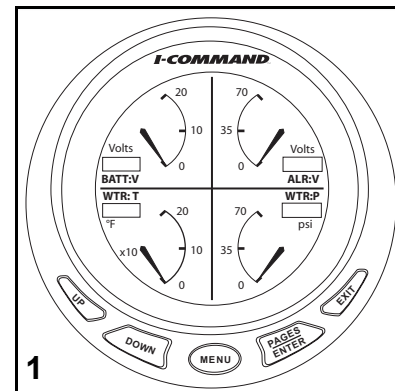


4. An incorrect entry will result in an INVALID PASS CODE message.
Press ENTER to start over.
5. Correct entry of pass code allows access to pages.
Use UP or DOWN buttons to select desired items and make changes.
6. When finished, press ENTER to return to gauge display.



Removing Pages

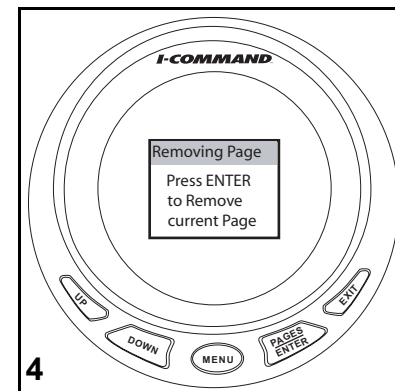
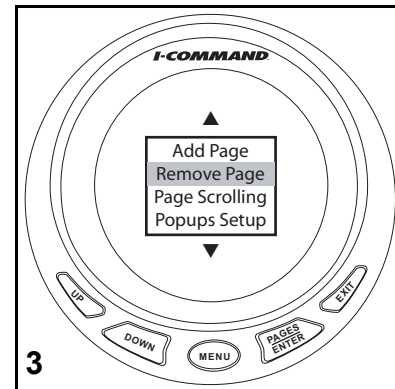
1. Press the ENTER button repeatedly to scroll to the page to be removed.
Press MENU.
2. Use UP or DOWN buttons to select PAGES.
Press ENTER.



3. Use UP or DOWN buttons to select REMOVE PAGE.
Press ENTER.

4. A confirmation message will appear.
Press ENTER to remove page.

The display will return to the next page.



Page Scrolling

Pages can be viewed by manual or automatic scrolling.

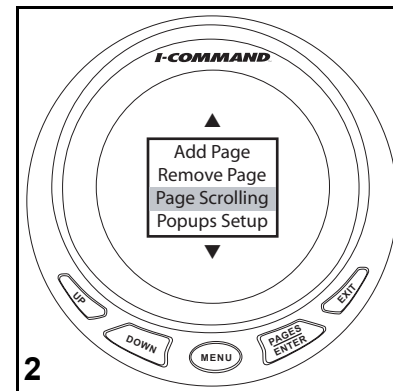
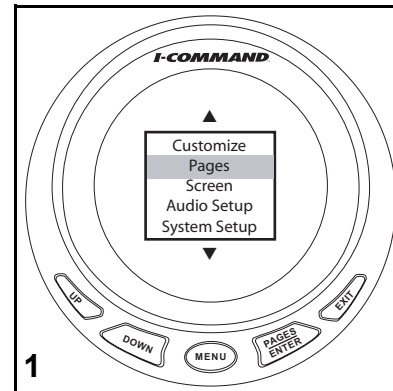
Manual

To scroll through pages manually, use the ENTER and EXIT buttons to view pages.

Automatic

To scroll through pages automatically, a viewing interval must be selected.

1. Press MENU.
Use the UP or DOWN buttons to select PAGES.
Press ENTER.
2. Use the UP or DOWN buttons, select PAGE SCROLLING.
Press ENTER.



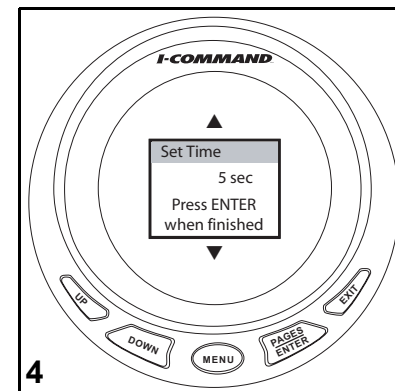
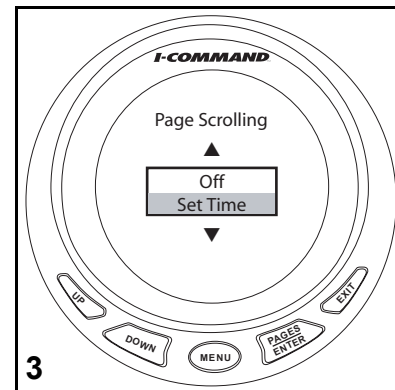
3. Use the UP or DOWN buttons to select SET TIME.
Press ENTER.

4. Use the UP or DOWN buttons to set time.

Select an interval between one and sixty seconds.

Press ENTER to set automatic scrolling interval.

Note: To turn off automatic page scrolling, repeat the first two steps. When the Page Scrolling menu appears, select OFF. Then press ENTER.



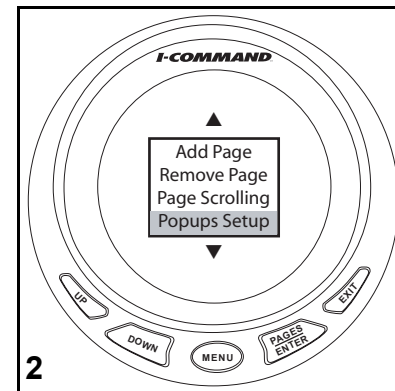
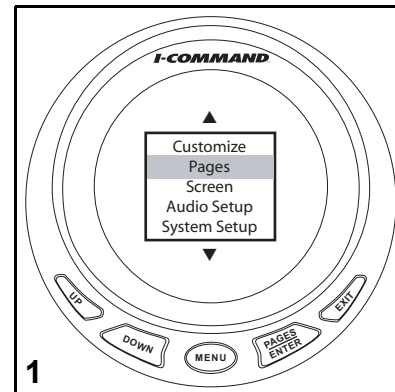
Pop-Ups

The Pop-Up feature alerts users when changes occur in a monitored category (RPM, Engine Trim, Trim Tabs or Rudder). Pop-ups appear when a user-specified incremental measurement is met. When an increment changes, the main page for the category will pop up on the main display for a preset duration. See “Stay-on Time” on page 52 to set the pop-up duration.

Setting a Pop-Up

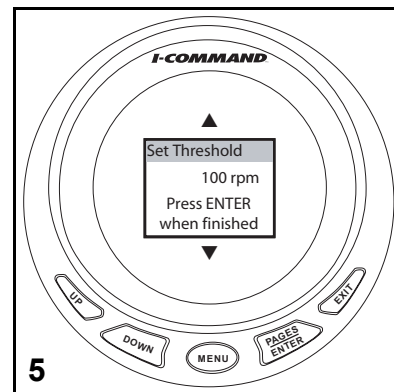
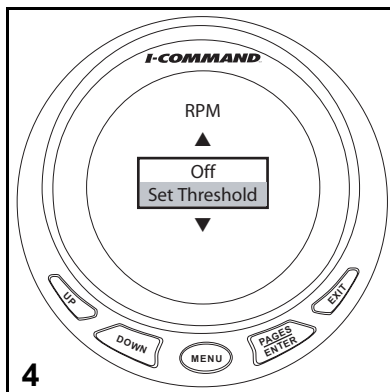
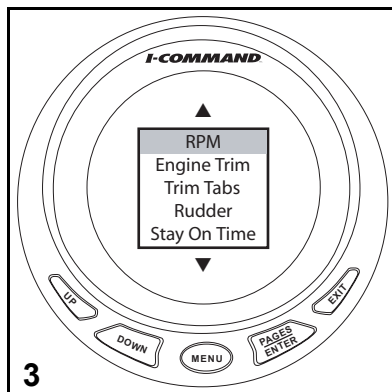
This example illustrates setting the RPM Pop-Up. Engine trim, trim tabs and rudder can be set up similarly.

1. Press MENU.
Use UP or DOWN buttons to select PAGES.
Press ENTER.
2. Use the UP or DOWN button to select POPUPS SETUP.
Press ENTER.



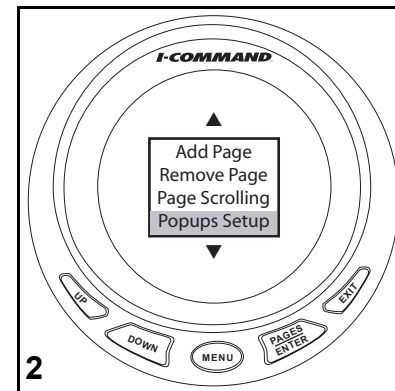
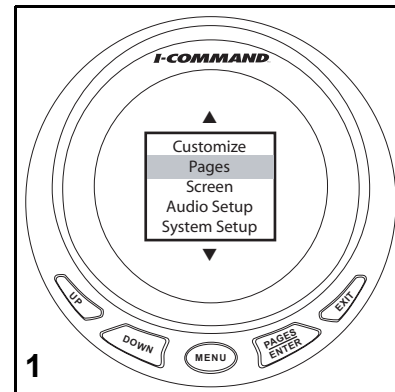
3. Use the UP or DOWN button to select RPM.
Press ENTER.
4. Use the UP or DOWN button to select OFF to turn off the RPM pop-up, or select SET THRESHOLD.
Press ENTER.
5. The threshold for RPM ranges from 50 to 3,000 RPM. Set the desired RPM value that activates the pop-up
by using the UP or DOWN buttons.

Press ENTER when finished.



Stay-on Time

1. Press MENU.
Use UP or DOWN buttons to select PAGES.
Press ENTER.
2. Use the UP or DOWN button to select POPUPS SETUP.
Press ENTER.

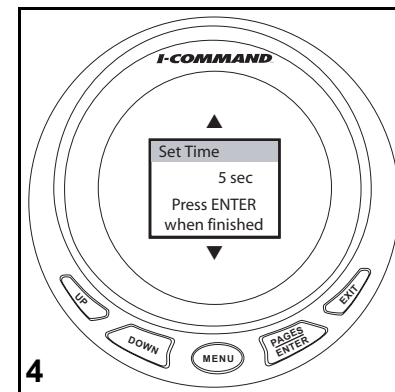
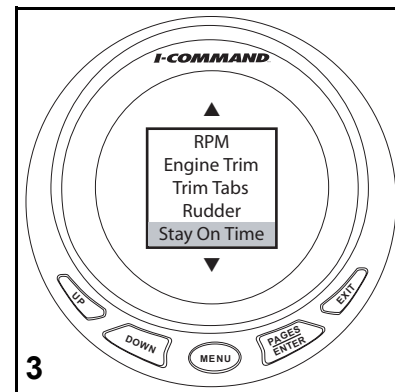


3. Use the UP or DOWN buttons to select STAY-ON TIME.
Press ENTER.

4. The stay-on time ranges between two and fifteen seconds. Set the
desired stay-on time using the UP or DOWN buttons.

Press ENTER when finished.

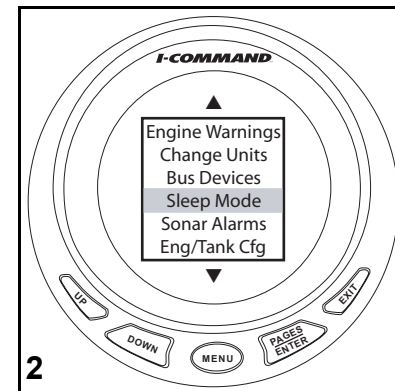
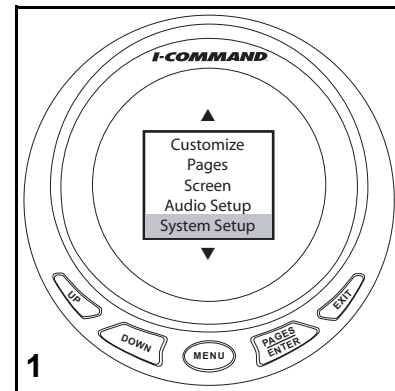
Note: The stay-on time selected applies to all monitored categories.



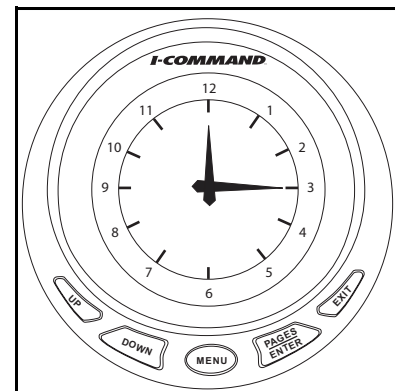
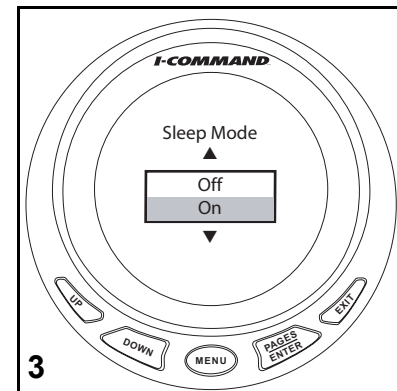
Sleep Mode

Sleep mode allows the *I-Command* gauge to enter a power-save status to keep from overdrawing the boat power source.

1. Press MENU.
Use Up or DOWN buttons to select SYSTEM SETUP.
Press ENTER.
2. Use the UP or DOWN button to select SLEEP.
Press ENTER.



3. Use the UP or DOWN buttons to select ON or OFF.
Press ENTER. Gauge will return to last display.



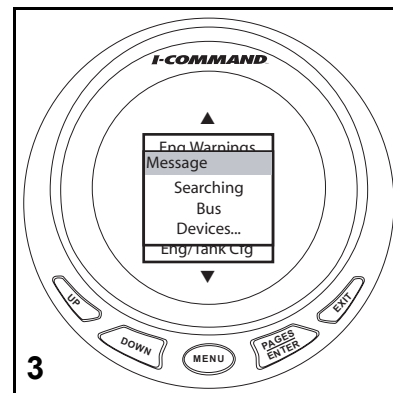
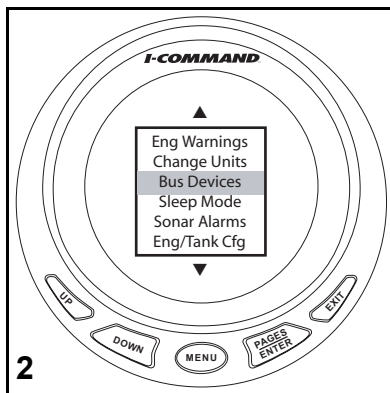
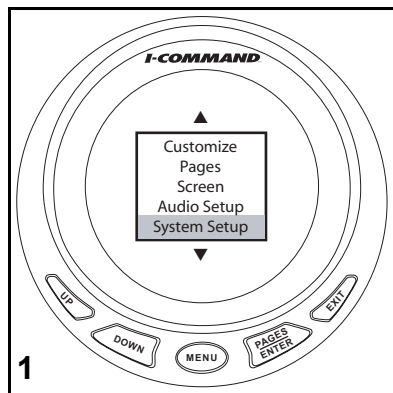
This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's resting on a surface.

Advanced Setup and Operation

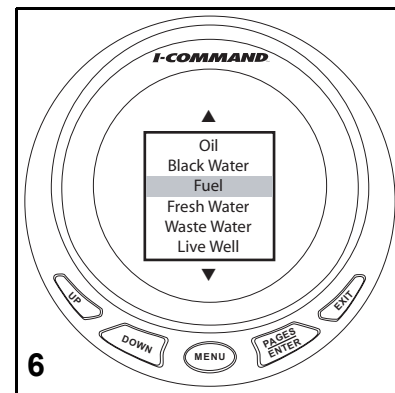
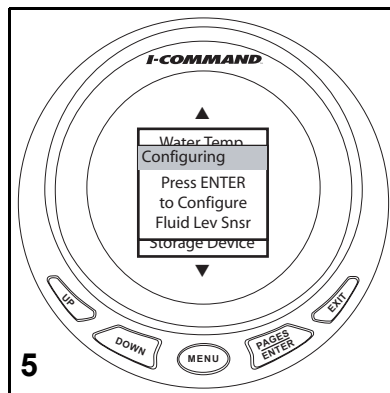
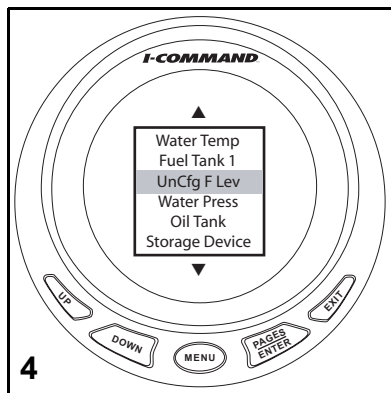
Configure Fluid Level Sensor

This example illustrates Fluid Level Sensor Configuration for the second of two fuel tanks. Fluid level sensors for other fluid tanks will configure similarly.

1. Press MENU. Use the UP or DOWN buttons and select SYSTEM SETUP.
Press ENTER.
2. Use the UP or DOWN buttons and select BUS DEVICES
Press ENTER.
3. The gauge will search for devices.



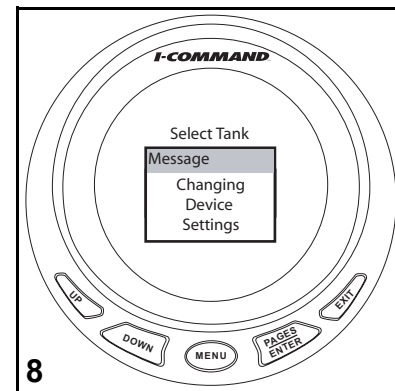
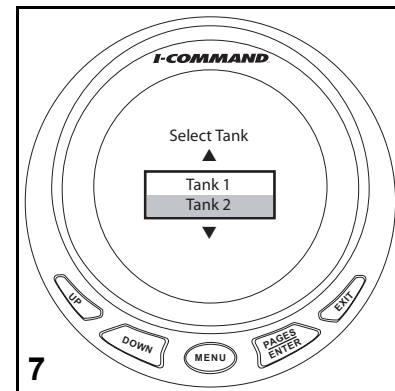
4. Use the UP or DOWN buttons and select UNCFG F LEV.
Press ENTER.
5. Press ENTER to configure Fluid Level Sensor.
6. Use the UP or DOWN buttons to select FUEL.
Press ENTER.



7. Use the UP or DOWN buttons and select the tank.
Press ENTER.

8. The gauge will change the tank setting and return to the BUS DEVICES list.

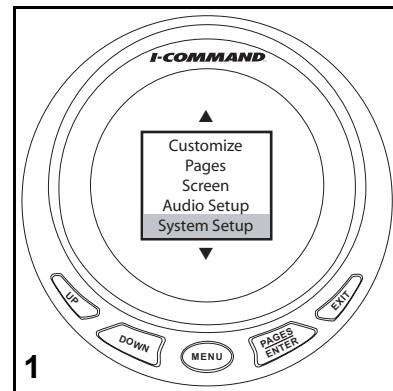
Proceed to “Fuel and Fluid Level Sensor Calibration” on page 61.



Fuel and Fluid Level Sensor Calibration

Fluid level sensors use the tank sending unit to calculate remaining fuel, oil, water etc. Calculation is based on sending unit accuracy, capacity entered during setup, and liquid level in the tank. Use the FIVE POINT calibration to achieve best accuracy.

- Two-Point calibrates EMPTY and FULL levels.
- Three-Point calibrates EMPTY, 50% and FULL levels.
- Five-Point calibrates EMPTY, 25%, 50%, 75% and FULL levels.

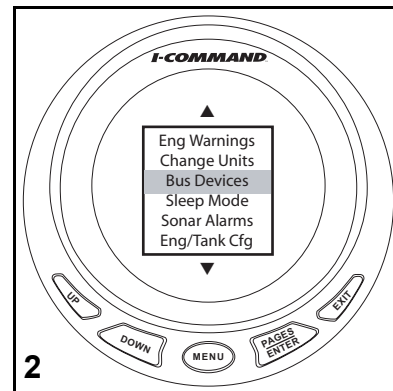


⚠ WARNING

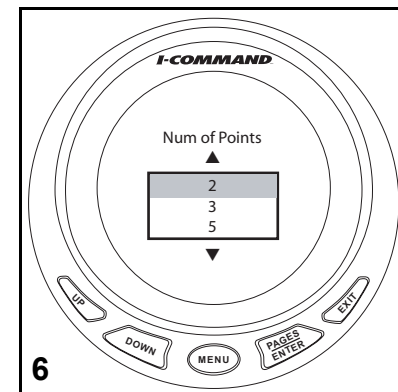
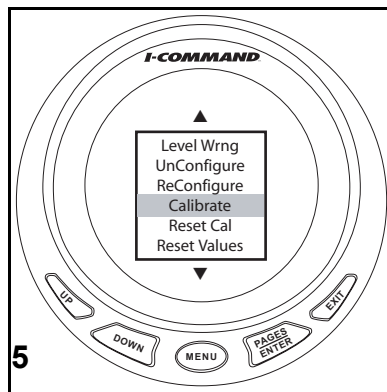
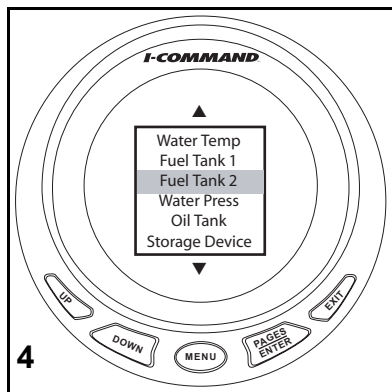
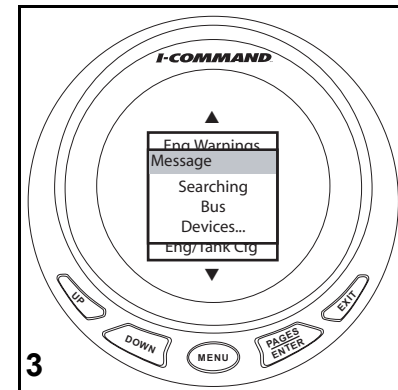
Running out of fuel could cause the operator of the boat to have diminished or no control of the vessel, presenting a risk of personal injury to the operator, passengers, and people who are nearby.

This example illustrates a 2-Point Calibration. Follow the on-screen prompts if a Three or Five-Point Calibration is desired.

1. Press MENU. Use the UP or DOWN buttons and select SYSTEM SETUP. Press ENTER.
2. Use the UP or DOWN buttons and select BUS DEVICES. Press ENTER.



3. The gauge will search for devices.
4. Use the UP or DOWN buttons to select the device to be calibrated.
Press ENTER.
5. Use the UP or DOWN buttons and select CALIBRATE.
Press ENTER.
6. Use the UP or DOWN buttons to select the number of points for the calibration.
Press ENTER.



7. Select EMPTY LEVEL.

Press ENTER.

8. Be sure the tank is EMPTY.

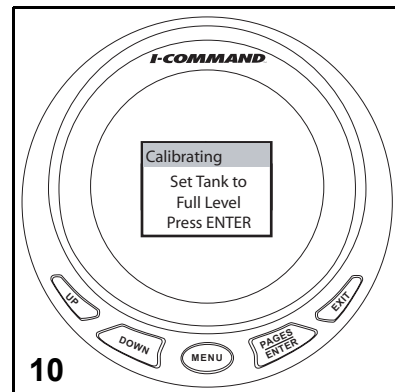
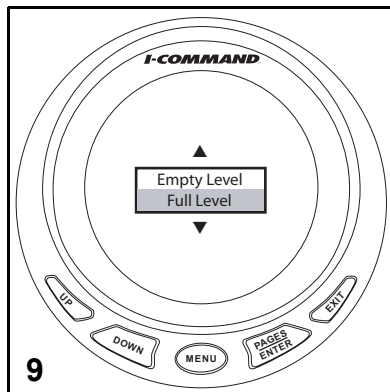
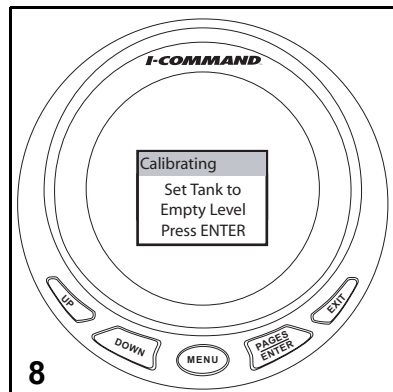
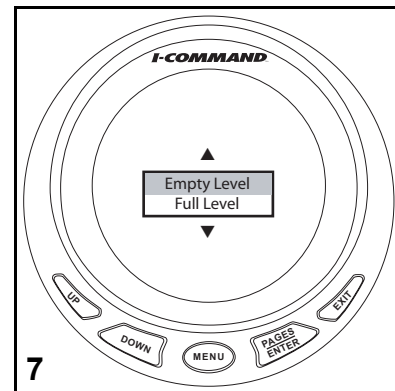
Press ENTER.

9. Select FULL LEVEL.

Press ENTER.

10. Fill the tank.

Press ENTER.

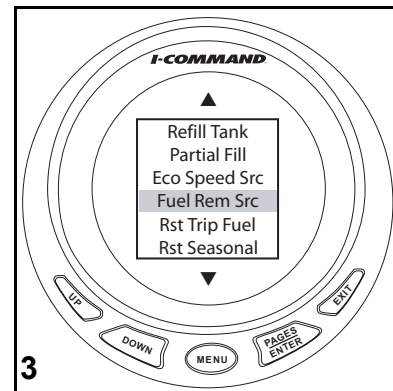
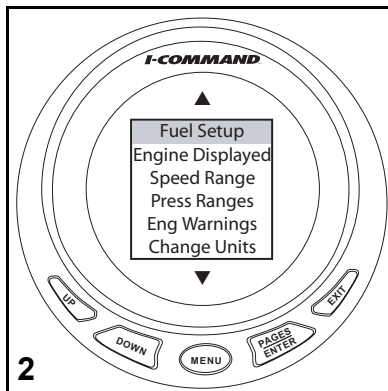
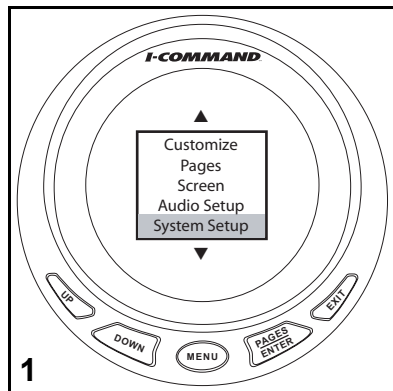


Fuel Management

Select Fuel Remaining Source

Perform the following procedure on each gauge. The default setting is FLUID LEV SNSR.

1. Press MENU. Use the UP or DOWN buttons and select SYSTEM SETUP.
Press ENTER.
2. Use the UP or DOWN buttons and select FUEL SETUP.
Press ENTER.
3. Use the UP or DOWN buttons and select FUEL REM SRC.
Press ENTER.



Use the UP or DOWN buttons to make selection. Review the following to determine which choice will work best in your application.

FLUID LEV SNSR (Fluid Level Sensor) -

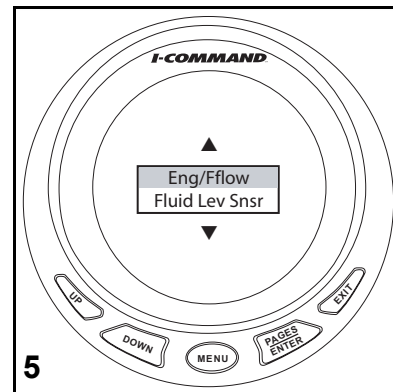
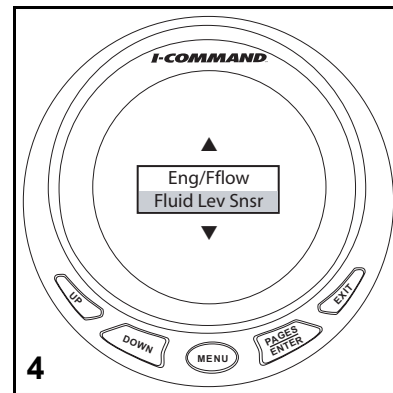
4. Fluid level sensor requires installation of a fuel tank level converter which uses the fuel tank sending unit to calculate remaining fuel. Calculation is based on sending unit accuracy, capacity entered during setup, and fuel consumed from tank. Use the FIVE POINT calibration (see “Fuel and Fluid Level Sensor Calibration” on page 61) to achieve the best accuracy.

ENG/FFLOW (Engine Fuel Flow) -

5. Engine fuel flow requires installation of memory module kit. Uses Out-board's *EMM* software to calculate fuel consumption. Total fuel use is calculated based on *EMM* fuel tables and subtracted from fuel tank capacity entered during setup.

A GPS antenna and memory module kit must be installed to track seasonal fuel, trip fuel, fuel range, and economy.

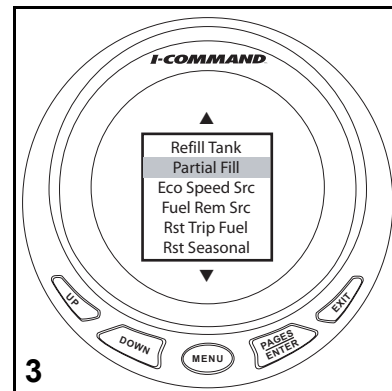
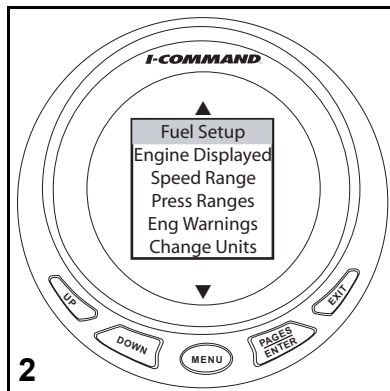
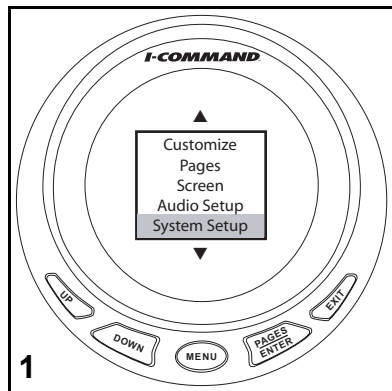
IMPORTANT: Fuel flow data from the *EMM* is required. User must enter amount of fuel added at each fill up (see “Refill Tank” on page 67) or perform the “Partial Fill” procedure (see “Partial Fill” on page 67). A GPS antenna must be installed for fuel management features to be functional.



Fuel Management Options

Use the following steps to access fuel management options.

1. Press MENU.
Use UP or DOWN buttons to Select SYSTEM SETUP.
Press ENTER.
2. Use UP or DOWN buttons to select FUEL SETUP.
Press ENTER.
3. Use the UP or DOWN buttons to select REFILL TANK or PARTIAL FILL.
Press ENTER.



Refill Tank

1. Choose the Refill Tank option to recalibrate the fuel tank level after it has been filled to full capacity.

Press the ENTER button after fuel tank has been filled.

Note: Only supported when the memory module is used as the fuel remaining source.

Partial Fill

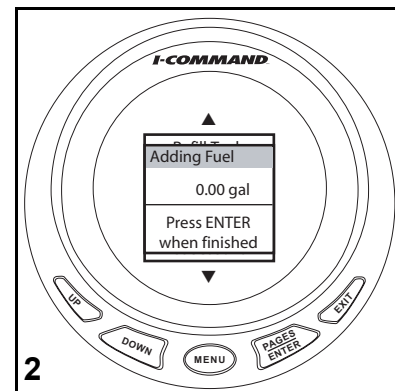
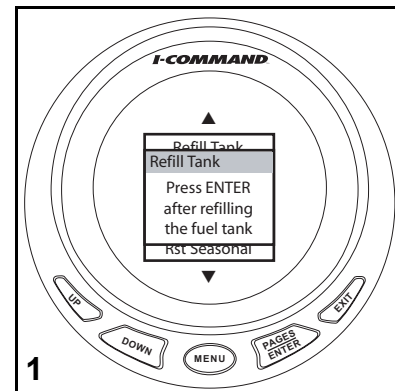
2. Choose the Partial Fill option to maintain the accuracy of the level by allowing users to input fuel added to the tank.

Use the UP button to enter the quantity of fuel added to the fuel tank.

Use the UP or DOWN button to make adjustments.

Press ENTER when finished.

Note: Only supported when the memory module is used as the fuel remaining source.



Economy Speed Source

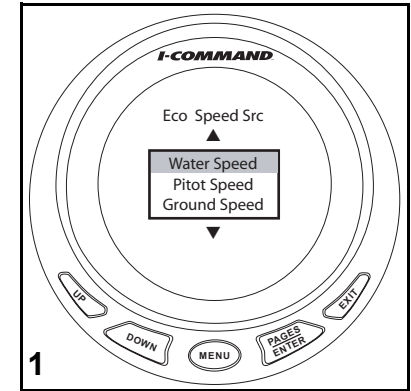
1. The Economy Speed Source option allows selection of the speed measurement source.

Notes:

- Water Speed (Paddle Wheel) is best suited for low speeds.
- Pitot Speed will work best at high speeds.
- Ground Speed (GPS) works well at both high and low speeds.

Use the UP or DOWN buttons to select the desired option.

Press ENTER when finished.



Reset Trip Fuel

1. The Reset Trip Fuel option resets a trip fuel usage total.

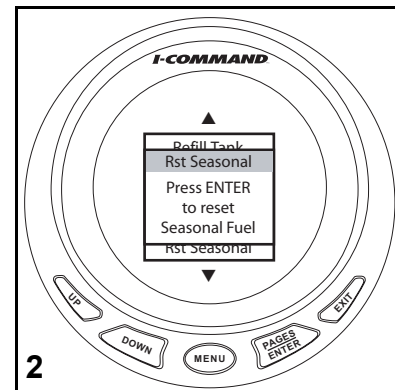
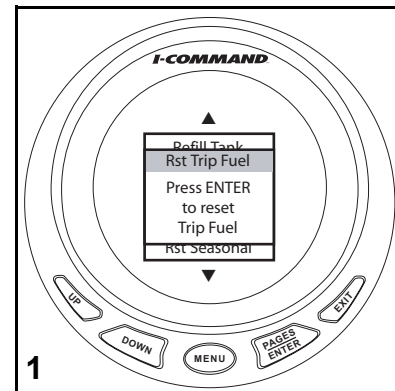
Press ENTER to reset the seasonal fuel total to zero.

Reset Seasonal Fuel

2. Fuel usage can be tracked for trips and even entire seasons. The reset seasonal option allows a reset of the total seasonal fuel usage.

Press ENTER again to reset the seasonal fuel total to zero.

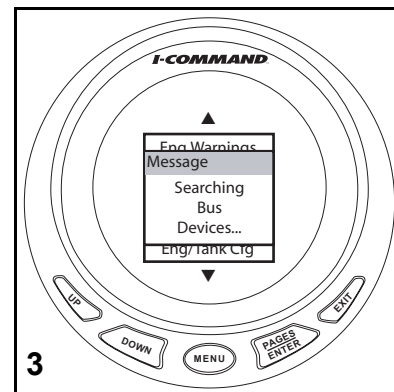
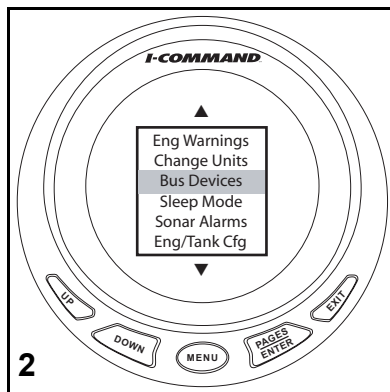
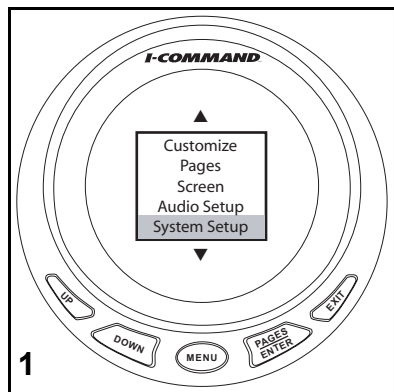
Note: For multi-engine applications, select the appropriate engine to reset, or select ALL ENGINES to simultaneously reset all engines.



Configure Sensors

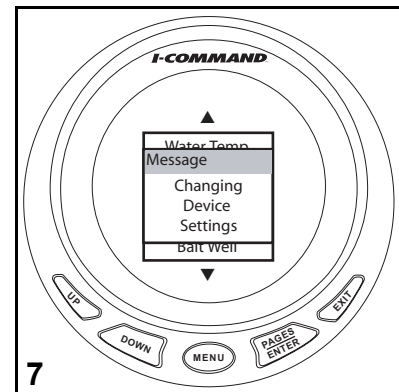
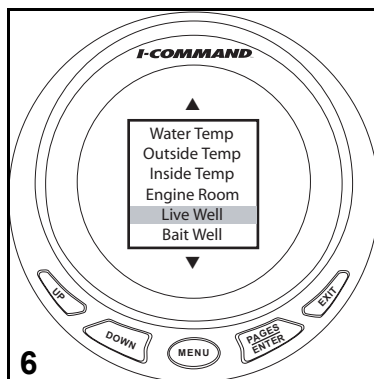
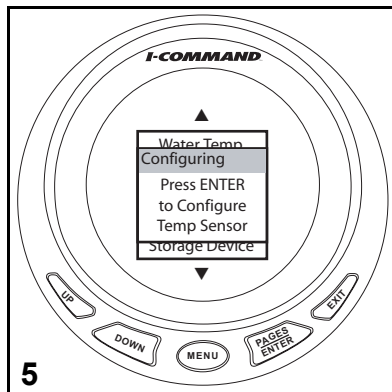
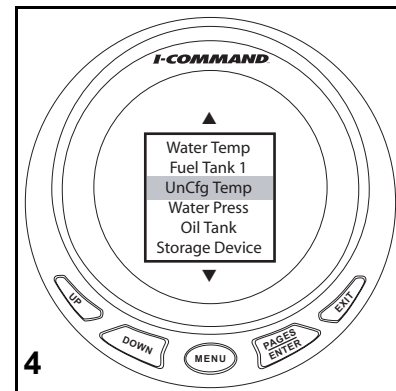
Temperature Sensor

1. Press MENU. Use the UP or DOWN buttons and select SYSTEM SETUP.
Press ENTER.
2. Use the UP or DOWN buttons and select BUS DEVICES.
Press ENTER.
3. The gauge will search for devices.



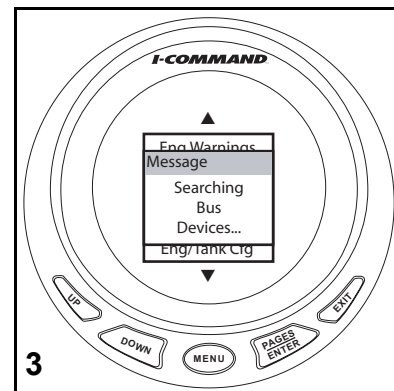
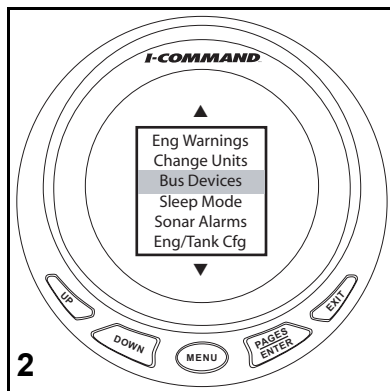
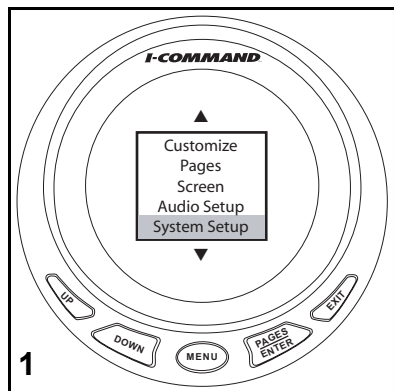
4. Use the UP or DOWN buttons and select UNCFG TEMP.
Press ENTER.
5. Press ENTER to configure Temperature Sensor.
6. Use the UP or DOWN buttons to make selection.
Press ENTER.
7. The gauge will change the device setting and return to the BUS DEVICES list.

Press EXIT three times to return to gauge display.



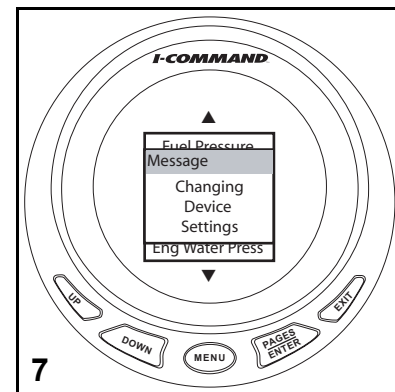
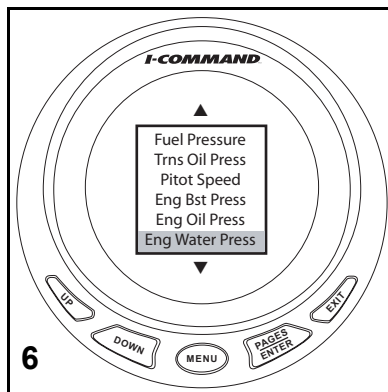
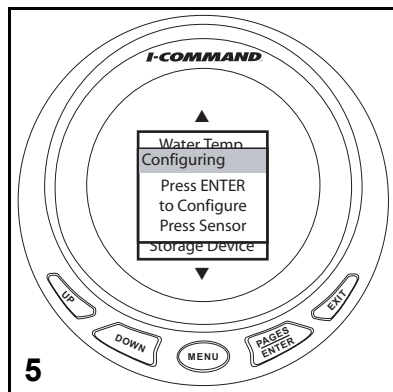
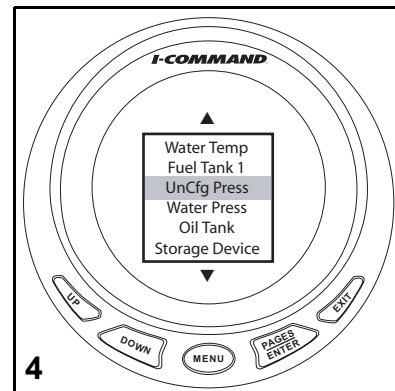
Configure Pressure Sensor

1. Press MENU. Use the UP or DOWN buttons and select SYSTEM SETUP.
Press ENTER.
2. Use the UP or DOWN buttons and select BUS DEVICES.
Press ENTER.
3. The gauge will search for devices.



4. Use the UP or DOWN buttons and select UNCFG PRESS.
Press ENTER.
5. Press ENTER to configure Pressure Sensor.
6. Use the UP or DOWN buttons to make selection.
7. The gauge will change the device setting and return to the BUS DEVICES list.

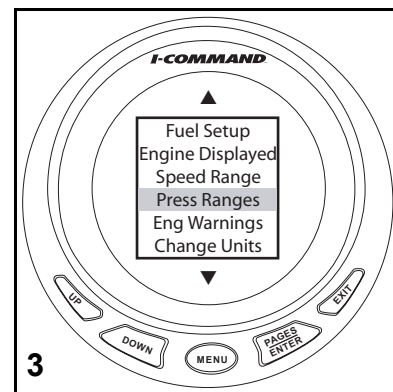
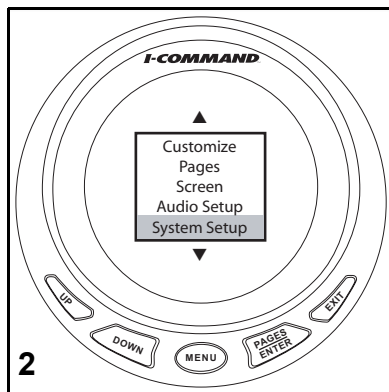
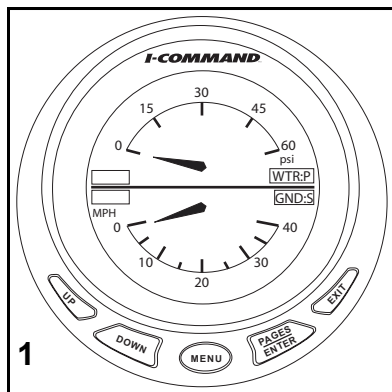
Press EXIT three times to return to gauge display.



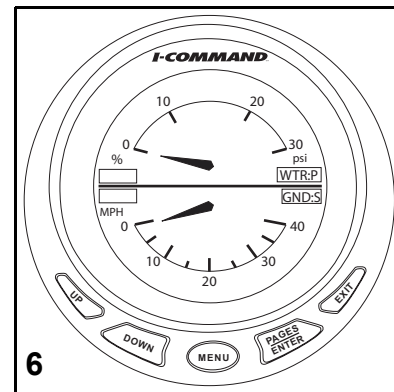
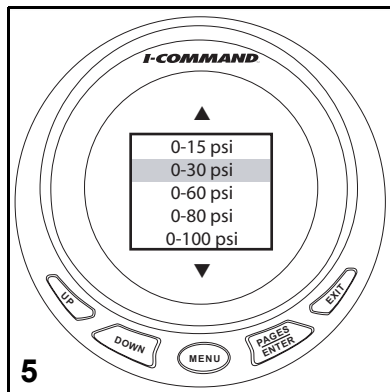
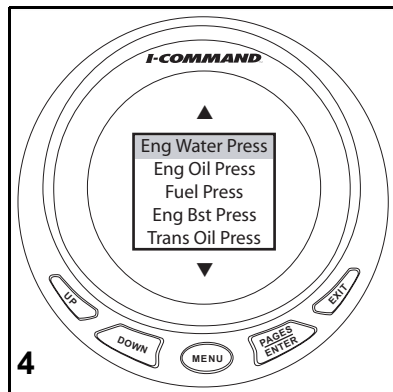
Change Ranges

This example will change the water pressure gauge to read from 0 – 60 psi, to 0 – 30 psi. Speed ranges and other pressure ranges can be changed in the same manner.

1. Press the ENTER button repeatedly to scroll to the page to be changed.
2. Press MENU. Use the UP or DOWN buttons and select SYSTEM SETUP.
Press ENTER.
3. Use the UP or DOWN buttons and select PRESS RANGES.
Press ENTER.



4. Use the UP or DOWN buttons and select ENG WATER PRESS.
Press ENTER.
5. Use the UP or DOWN buttons and select desired pressure range.
Press ENTER.
6. Gauge will now display selected range.

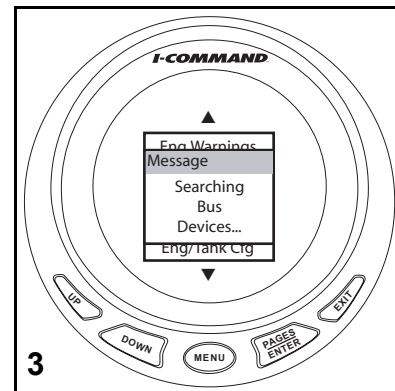
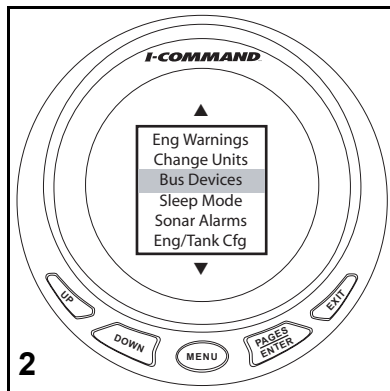
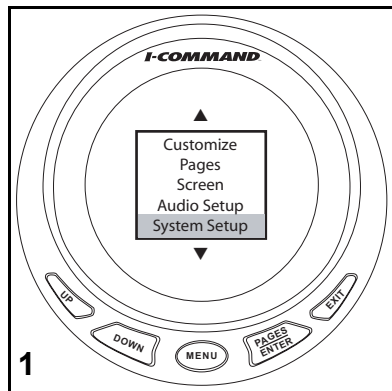


Winterize

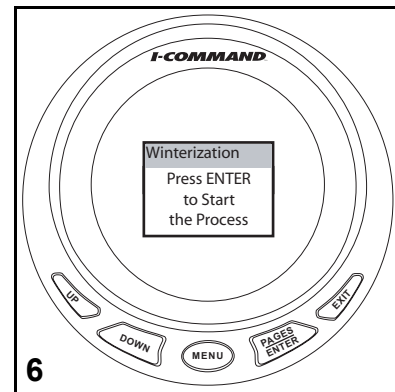
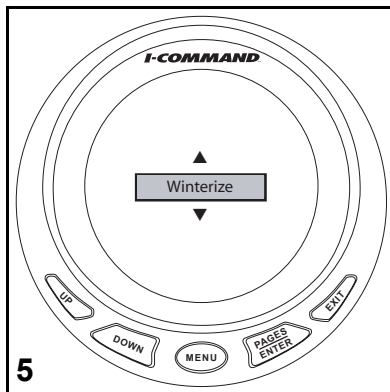
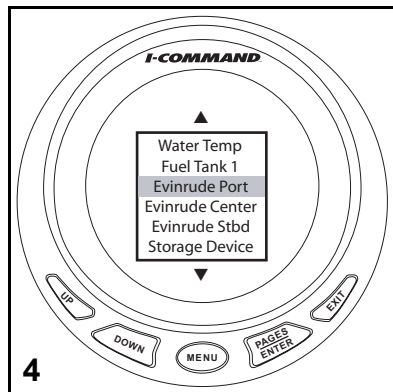
I-Command digital gauges (with software version 1.4.0 or higher) provide a winterize feature for 2008 or newer V4 and V6 models only.

Engine must be running to use this option. Refer to Outboard Operator's Guide for complete procedure and Safety Precautions.

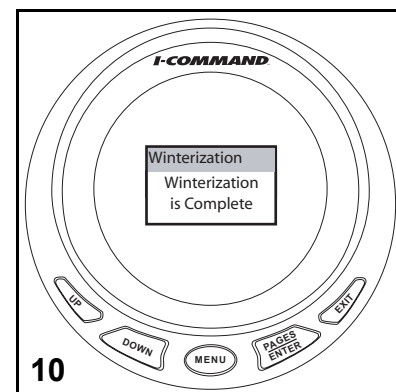
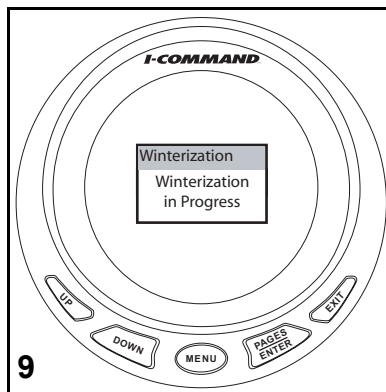
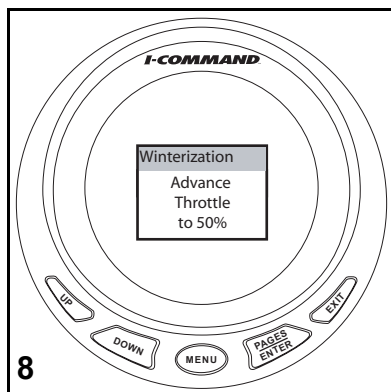
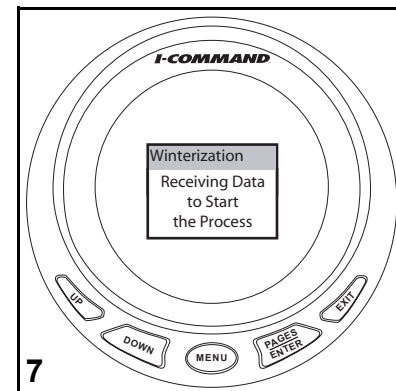
1. Press MENU. Use the UP or DOWN buttons and select SYSTEM SETUP.
Press ENTER.
2. Use the UP or DOWN buttons and select BUS DEVICES.
Press ENTER.
3. The gauge will search for devices.



4. Use the UP or DOWN buttons and select engine to winterize.
Press ENTER.
5. The gauge will display WINTERIZE menu.
Press ENTER.
6. Press ENTER again.



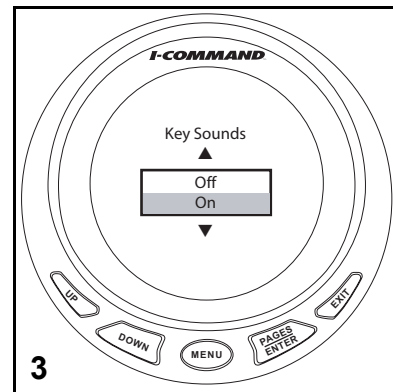
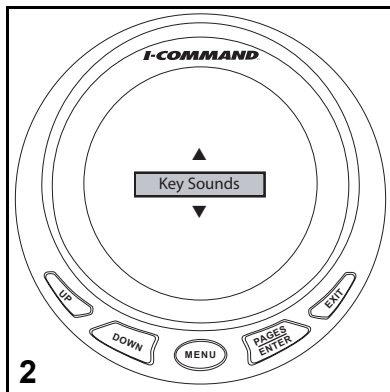
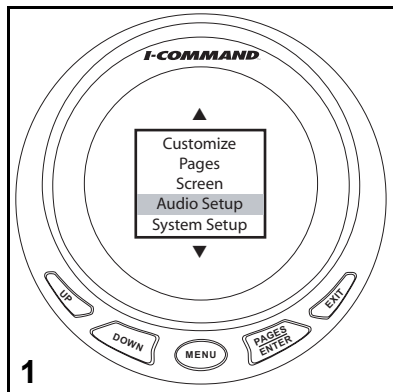
7. The gauge will display WINTERIZATION message.
 8. When prompted, engage NEUTRAL only button on throttle and advance THROTTLE ONLY to at least 50%.
 9. Gauge will display WINTERIZATION IN PROGRESS message.
 10. Gauge will display WINTERIZATION IS COMPLETE message.
- Press EXIT to return to BUS DEVICES menu.
- Repeat steps 4 through 10 for other engines (multi-engines set up only).



Audio Settings

The *I-Command* Digital gauge will emit audible sounds during operation. The key sounds can be turned OFF or ON.

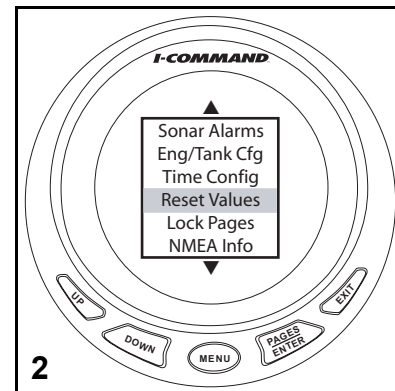
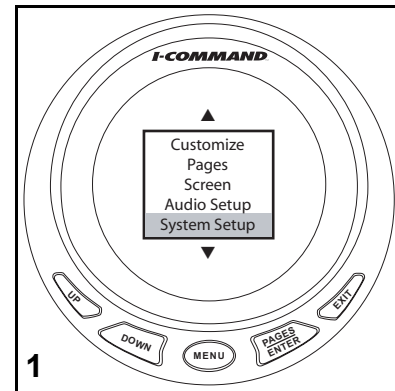
1. Press MENU.
Use the UP or DOWN buttons to select AUDIO SETUP.
Press ENTER.
2. Use the UP or DOWN buttons to select KEY SOUNDS.
Press ENTER.
3. Use the UP or DOWN buttons to select ON or OFF setting.
Press ENTER when finished.



Reset Values

RESET VALUES will not clear Engine/Tank configuration or the sensor settings that were previously calibrated or configured.

1. Press MENU.
Use UP or DOWN buttons to select SYSTEM SETUP.
Press ENTER.
2. Use UP or DOWN buttons to select RESET VALUES.
Press ENTER.



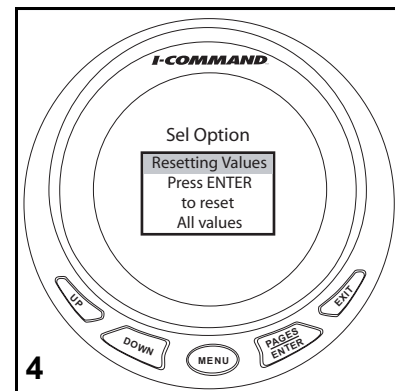
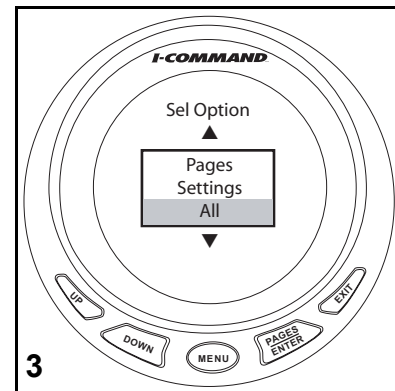
3. Use UP or DOWN buttons to select PAGES, SETTINGS or ALL.
Press ENTER.

Select PAGES to reset the seven factory default pages.

Select SETTINGS to reset Fuel Remaining Source, Fuel Economy Speed Source, Keypad Sounds, Sleep Mode, Fluid Level Warnings and Sonar Alarms.

Select ALL to reset both.

4. A confirmation message will appear.
Press ENTER to continue.

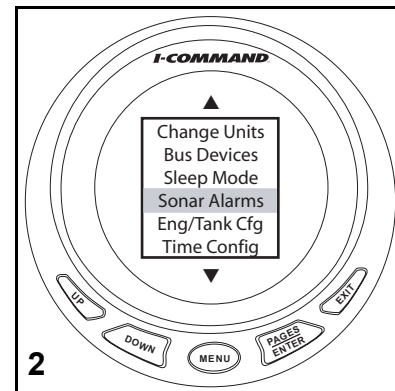
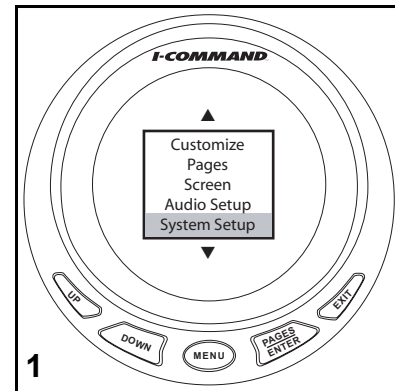


Sonar Alarms

Sonar alarms are available to aid in avoiding underwater objects or shallow operating conditions. A transducer or triducer is required for sonar alarm functionality.

This example will set the shallow sonar alarm.

1. Press MENU.
Use UP or DOWN buttons to select SYSTEM SETUP.
Press ENTER.
2. Use UP or DOWN buttons to select SONAR ALARMS.
Press ENTER.

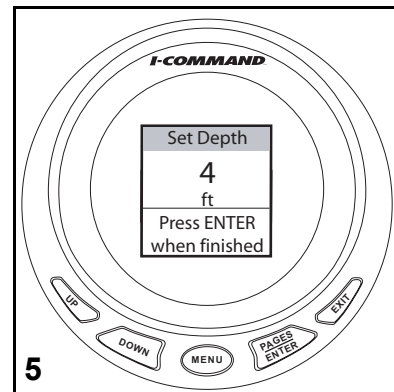
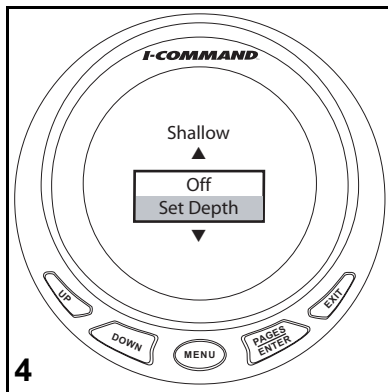
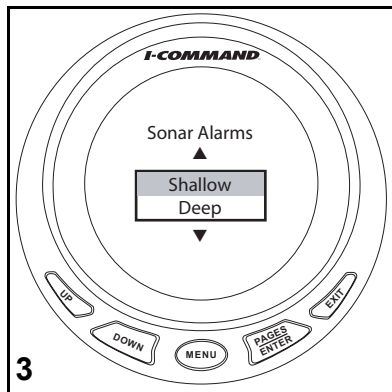


3. Use UP or DOWN buttons to select SHALLOW (or DEEP) alarm.
Press ENTER.
4. Use UP or DOWN buttons to select SET DEPTH (or OFF).
5. Use UP button to set depth. Use UP or DOWN buttons to make adjustments.
Press ENTER to save selection.

To set DEEP alarm, press EXIT one and go to Step 3.

To turn sonar alarms OFF, press EXIT and go to Step 4.

Press EXIT four times, when finished.



This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Troubleshooting

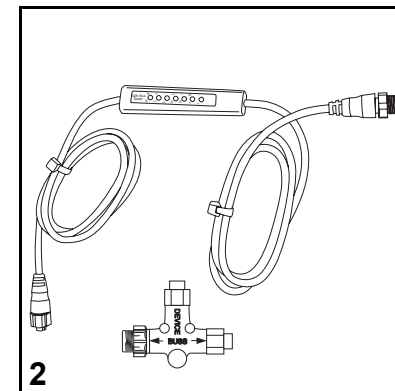
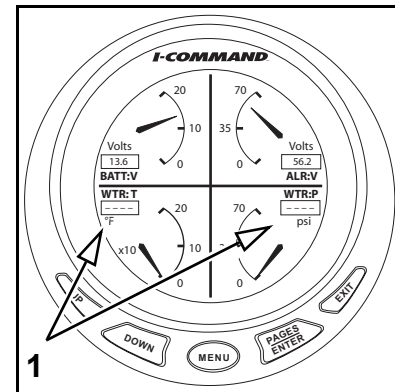
Gauge Flashes Four Dashes

1. If the *I-Command* digital display flashes four dashes (— — — —) it indicates the gauge is not receiving signal from one or more devices.
2. A Network Test Kit, P/N 765023 is available to assist in troubleshooting network problems. If desired, order the tester kit through your dealer.

Troubleshoot network problems using process of elimination.

- Make sure devices are configured. See “Advanced Setup and Operation” on page 57.
- If multiple displays are flashing, check common items such as cables and tees.
- Remove components from the network **one at a time** to isolate which one may have failed.
- Look for damaged parts. Check connectors for corrosion.
- Swap known good components (sensor, cables or tees) to isolate the faulty component.
- Reconnect the good component to the network and then remove the next one in line.
- Continue this process for each device, cable or tee connector on the network until the faulty part is found.

Note: Once components are reconnected, if the digital display continues to flash, turn power to the network OFF and back ON to reset the gauge(s).



Engine Warnings

The *I-Command* gauges monitor engine conditions and display warnings in the event of a malfunction. Refer to the outboard Operator's Guide if any engine warnings are displayed.

WARNING MESSAGE DISPLAYED	POSSIBLE CAUSE / PROCEDURE
Check Engine	A "Check Engine" condition may be activated when a critical engine condition occurs, or when a service is required: <ul style="list-style-type: none">· A "Critical" condition will activate <i>S.A.F.E.</i> (RPM reduction) - Seek assistance to return to safe harbor immediately and see your dealer.· A minor service issue will NOT activate <i>S.A.F.E.</i> - See your dealer as soon as practical.
Over Temperature	Engine or <i>EMM</i> above temperature range. Check cooling water to water intakes.
Low Oil Level	A low oil level has been detected in the oil tank. Fill tank.
Low System Voltage	A low voltage condition has been detected. See your dealer.
Rev Limit Exceeded	The RPM limit has been exceeded. Reduce throttle.
Throttle Position Sensor	A throttle position sensor fault has been detected. See your dealer.
Power Reduction	<i>EMM</i> has activated <i>S.A.F.E.</i>
Neutral Start Protection	Attempt to start engine while in gear. Shift to neutral.
Engine Shutting Down	<i>EMM</i> has activated engine shutdown.

Evinrude E-TEC Engine Warnings

The *I-Command* gauges monitor engine conditions and display warnings in the event of a malfunction. The following table lists warnings that are specific to *Evinrude E-TEC* models. Refer to the outboard Operator's Guide if any engine warnings are displayed.

WARNING MESSAGE DISPLAYED	POSSIBLE CAUSE / PROCEDURE
Sensor malfunction see dealer	Throttle position sensor fault detected
	Analog 5V supply overload detected
	Exhaust pressure circuit fault detected
RPM reductn activated see dealer	System Voltage below expected range
	System Voltage above expected range
Winterization Mode activated	Auto-winterization routine activated
Overheat RPM reductn activated see manual	EMM temperature above expected range
Low battery voltage see manual	Battery voltage below expected range
Overheat Eng Shutdwn see manual	Engine shutdown, EMM above max temperature
	Engine shutdown, engine above max temperature
No Oil Shutdwn see manual	Engine shutdown, excessive no oil fault
No Oil RPM reductn check oil	Oil solenoid open circuit
Water in Fuel, service soon	Water in fuel detected

WARNING MESSAGE DISPLAYED	POSSIBLE CAUSE / PROCEDURE
No Oil RPM reductn see dealer	Oil pressure pulses in manifold not detected
No Oil RPM reductn see dealer	Oil system prime failure
Sensor malfunction service soon	Engine temperature sensor, Air temperature sensor, Oil pressure circuit or Water pressure circuit fault detected
Overheat RPM reductn chk water and manual	Engine temperature above range
Injector malfunction see dealer	Fuel injector open or short circuit detected
Engine Shutdown see dealer	Possible fuel leak. Seek assistance to return to harbor, see dealer immediately.
Solenoid malfunction see dealer	Starter solenoid circuit open-circuit
	Water injection solenoid open circuit
Ignition malfunction see dealer	Ignition primary open circuit detected
Fuel pump malfunction see dealer	Fuel pump open circuit detected
Power valve malfunction see dealer	Exhaust valve solenoid open circuit

Network Troubleshooting Chart

DESCRIPTION	POSSIBLE CAUSE / PROCEDURE
Four dashes “----” displayed on LCD	<p>Vessel: Requires input from the device which supplies the data. Check that the device is present and connected to the network. Verify the device within the Bus Devices menu. See “Gauge Flashes Four Dashes” on page 86.</p> <p>Outboard: Check engine position setting for both the display and outboard. Use <i>Evinrude Diagnostics</i> software for outboard setting (multi-engine applications). Check <i>EMM</i> cable connections to network and outboard.</p>
<i>I-Command</i> System does not power up	Check Power Supply Harness, fuses and switched B+ from ignition harness. Check all connections See Note below.
Power Supply Harness has blown fuse	Network current draw is exceeding 3A. Check all connections and wiring. Disconnect accessory connections to network. Isolate possible overloads or shorted accessory or display. Follow troubleshooting steps in “Gauge Flashes Four Dashes” on page 86.
<i>I-Command</i> instrument display is erratic	Check for installation of two terminators in system. Check network buss cable and device connections. See “Terminating Resistors” on page 12.
No speed display	Requires input from NMEA 2000 speed transducer and/or GPS receiver.
Speed-Over-Ground (SOG) does not display	Requires input from NMEA 2000 GPS receiver.
Speed-Over-Water (SOW) does not display	Requires input from NMEA 2000 speed transducer.

DESCRIPTION	POSSIBLE CAUSE / PROCEDURE
Water depth does not display	Requires input from NMEA 2000 depth transducer.
Sea water temperature does not display	Requires input from NMEA 2000 temperature transducer.
Fuel tank level does not display	Requires fuel level sensor. See “Configure Fluid Level Sensor” on page 58 and “Fuel and Fluid Level Sensor Calibration” on page 61.
No “Fuel Manager”	Requires memory module and setup of the <i>I-Command</i> display. See “Fuel Management” on page 64.
No “Fuel Economy” display for Fuel Management	Requires input from NMEA 2000 GPS receiver. Also see “Display Fuel Economy” on page 30.
Oil tank level does not display	Requires input from oil tank sender. Each oil tank uses an out-board position specific converter. See “Configure Fluid Level Sensor” on page 58.
Engine water pressure does not display	Requires input from a water pressure transducer. See “Configure Pressure Sensor” on page 72. If using P/N 5006214 water pressure sensor (threaded into engine block), use <i>Evinrude Diagnostics</i> Software set <i>EMM</i> . See “Engine Options” on page 14.
Water pressure related fault codes observed after initial setup	Check for incorrect water pressure transducer connections at engine.
<p><i>Note:</i> <i>I-Command</i> device must be connected to device connector (center) of Tee-connector. Check condition of all Tee-connector(s). Inspect pins and sockets of Tee-connectors and device connectors carefully. Damaged or shorted connectors can damage 3 amp fuse.</p>	

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Updating Gauge Software

Software Updates

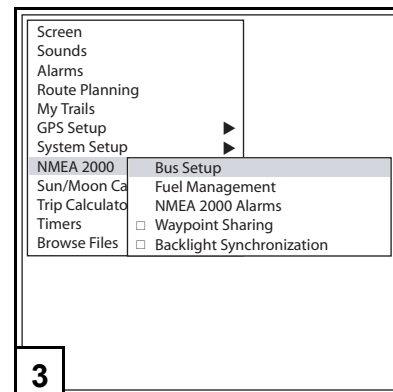
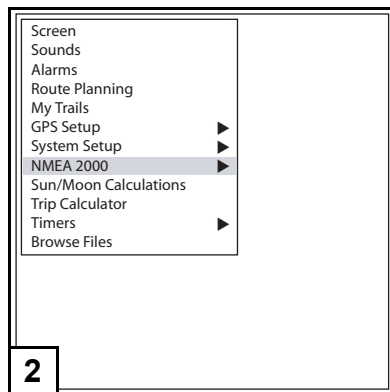
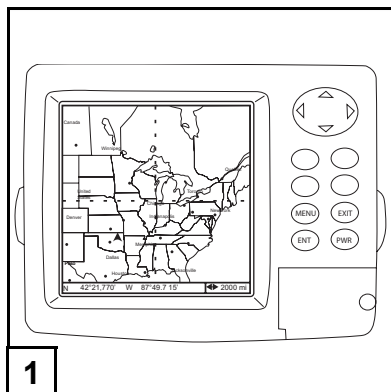
Software for *I-Command* gauges can be updated with GPS Head Unit Kit, P/N 764592, or any Lowrance unit using an SD card. Update files are available from www.evinrude.com. Transfer files to an SD memory card, using a card reader and PC. When transfer is complete, insert the SD card into the card slot of the head unit.

Check Device Data

1. Press PWR button to turn on unit

Unit will display a map screen. Press EXIT to turn off any pop-up screens.

2. Press MENU button twice. Use the arrow keys to select NMEA 2000 (some units may display NETWORKING).
3. Press the ENT button. The next menu will appear. Use the arrow keys to select Bus Setup. Press the ENT button.



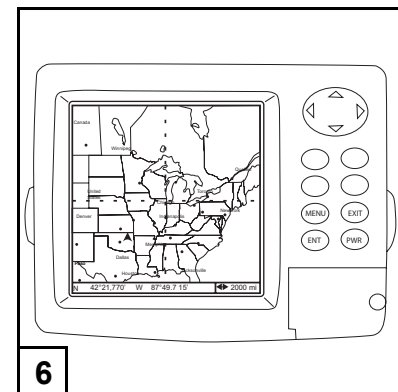
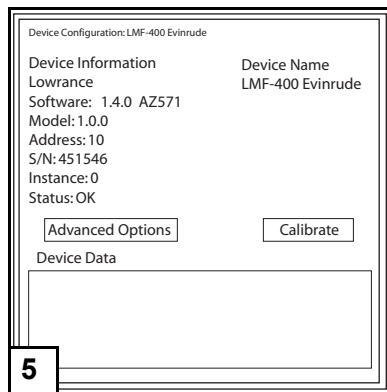
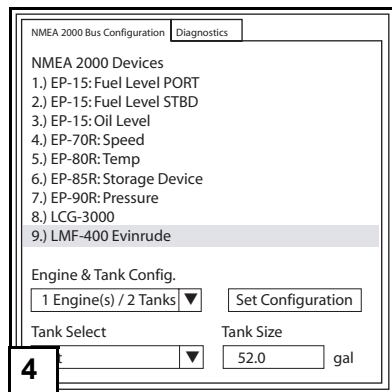
4. A list of all NMEA 2000 device on the network will display.

Use the arrow keys to select the device to check.

Press ENT button.

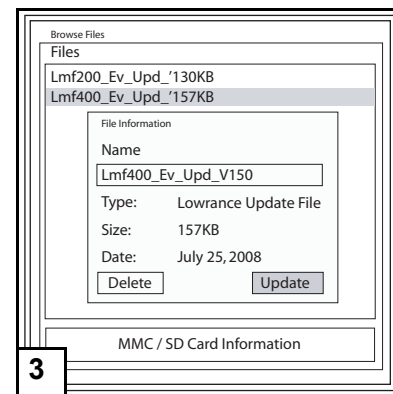
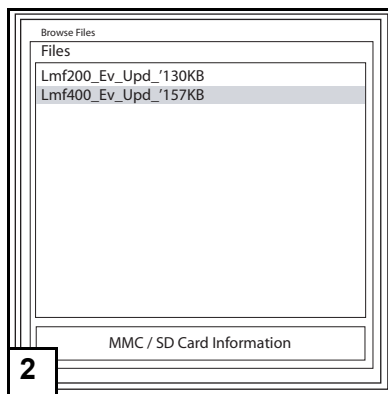
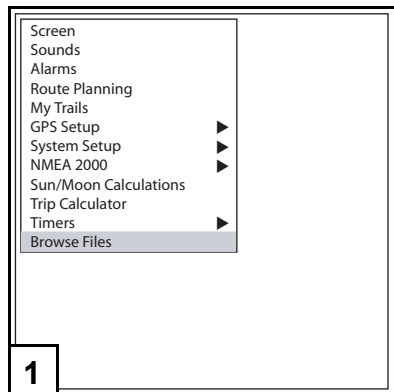
5. The device information will display. Use the software number to determine if an update is needed.

6. Press EXIT until the map screen appears.

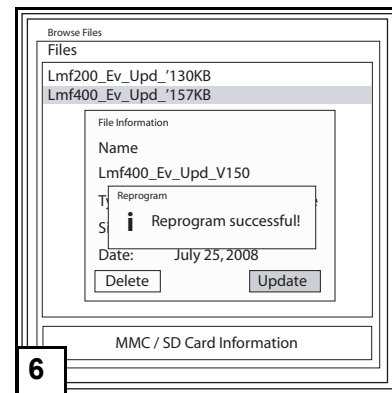
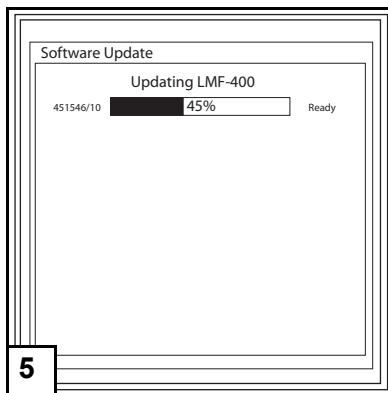
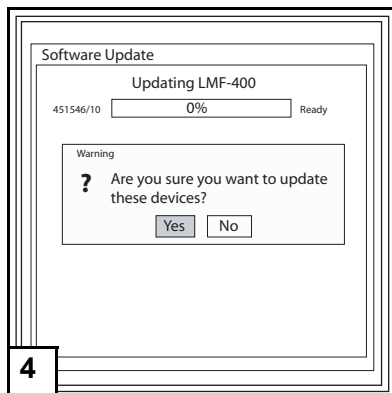


Update Software

1. Press MENU button twice. Use the arrow keys to select BROWSE FILES.
2. Press the ENT button. The list of update files on the SD memory card will appear.
Press the ENT button.
Use the arrow keys to select the correct update file.
Press the ENT button.
3. Use the arrow keys to select UPDATE.
Press the ENT button



4. Use the arrow keys to select YES.
Press the ENT button.
 5. A status bar will display the update progress.
 6. When the update has finished loading, a REPROGRAM SUCCESSFUL message will display.
- Confirm the software update by repeating the steps in “Check Device Data” on page 94.



Troubleshooting Failed Updates

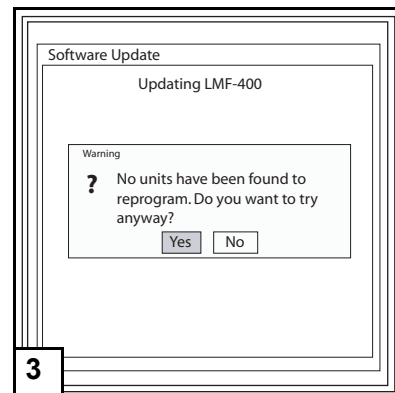
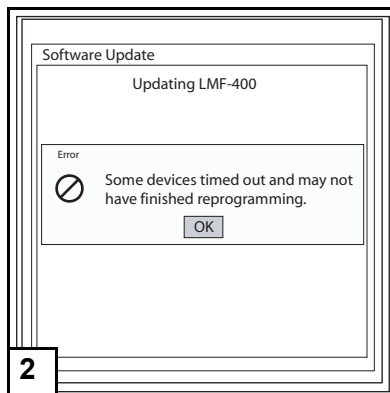
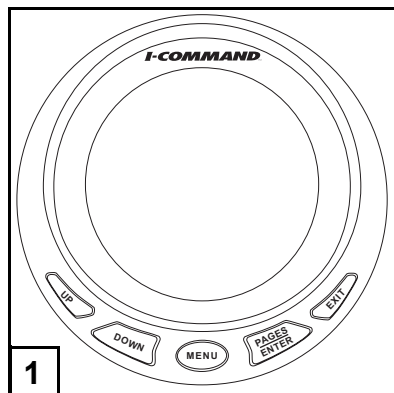
1. If a gauge “times out” or does not successfully update, it will display a blank or white screen.
2. An error message will display if a device times out.

If either of these conditions occur, turn OFF power to the network. Disconnect the all the gauges from the network at their tee connectors. Note which gauge(s) have a blank screen. Turn power back ON.

IMPORTANT: Read the remainder of this section BEFORE continuing.

Repeat the steps in “Update Software” on page 96.

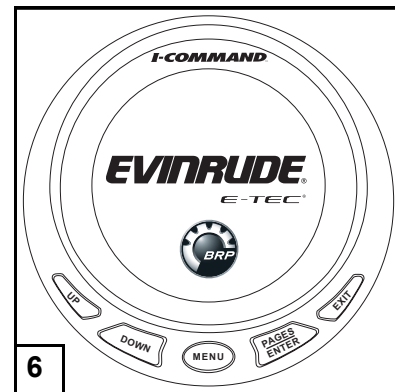
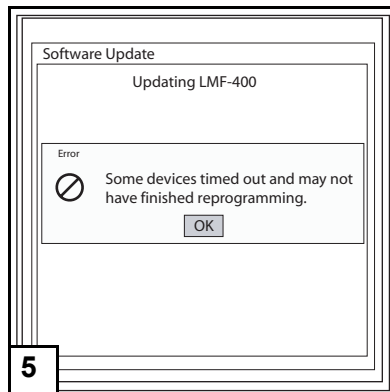
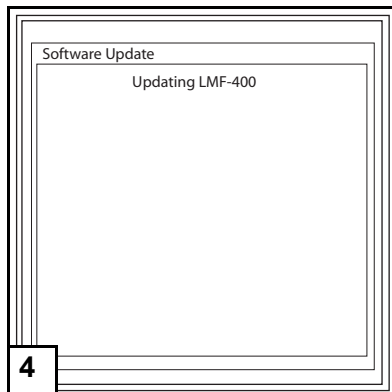
3. After Step 4 of Update Software, an additional message will display.
Use the arrow keys to select YES.
Press the ENT button.



4. When a blank software update screen appears, connect one gauge to the network.

5. This restores the gauge operation.

If more than one gauge was blank, repeat this process for each gauge. When finished, reconnect any remaining gauges to the network.



This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Reference Information

Abbreviation Tables

Use the abbreviation tables to interpret information from the *I-Command* gauge.

Abbreviation	Function	Abbreviation	Function
AIR:T	Air Temperature	FRW:L:3	Fresh Water Tank 3
ALR:V	Alternator voltage	FUL:CP	Fuel Capacity
ATM:P	Atmospheric Pressure	FUL:E	Fuel Economy
BAT:C	Battery current	FUL:W:E	Water Fuel Economy
BAT:T	Battery Temperature	FUL:G:E	GPS Fuel Economy
BAT:V	Battery voltage		Fuel Economy Speed Source
BKW:L:1	Black Water Tank 1	FUL:F:C	Fuel Flow Center
BKW:L:2	Black Water Tank 2	FUL:F:P	Fuel Flow Port
BKW:L:3	Black Water Tank 3		Fuel Flow Source
BST:P	Boost Pressure	FUL:F:S	Fuel Flow Starboard
WTR:P	Coolant Pressure	FUL:L	Fuel Level
CYL:T	Cylinder Temperature	FUL:P	Fuel Pressure
DPT	Depth	FUL:RG	Fuel Range
ENG:L	Engine Load	FUL:W:RG	Water Fuel Range
ENG:T	Engine Temperature	FUL:G:RG	GPS Fuel Range
ENG:TQ	Engine Torque	FUL:RM	Fuel Remaining
ENG:TM	Engine Trim	FUL:RM:C	Fuel Remaining Center
ENG:W:T	Engine Water Temperature	FUL:RM:P	Fuel Remaining Port
FRW:L	Fresh Water Level		Fuel Remaining Source
FRW:CP	Fresh Water Capacity	FUL:RM:S	Fuel Remaining Starboard

Abbreviation	Function	Abbreviation	Function
FRW:L:1	Fresh Water Tank 1	FUL:L:C	Fuel Tank Center
FRW:L:2	Fresh Water Tank 2	FUL:L:P	Fuel Tank Port
FUL:L:S	Fuel Tank Starboard	OUT:T	Outside Temperature
FUL:U	Fuel Used	PWD:S	Paddlewheel speed
FUL:U:C	Fuel Used Center	PTT:S	Pitot speed
FUL:U:P	Fuel Used Port	RPM:RT	Rated RPM
FUL:U:S	Fuel Used Starboard		Reset Seasonal Fuel Used
GPS:S	GPS speed		Reset Trip Fuel Used
IND:T	Inside Temperature	FUL:U:S	Seasonal Fuel Used
INT:T	Intake Air Temperature	BKW:L	Sewage Level
	K-Value set	BKW:CP	Sewage Capacity
LVW:L	Live Well Level	RPM	Tachometer
LVW:CP	Live Well Capacity	ENG:T:H	Total Engine Hours
LVW:L:1	Live Well Tank 1	TTB	Trim Tabs
LVW:L:2	Live Well Tank 2	FUL:U:TP	Trip Fuel Used
LVW:L:3	Live Well Tank 3	FLD:L	Unknown Fluid Level
MAN:P	Manifold Pressure	FLD:CP	Unknown Fluid Capacity
OIL:CP	Oil Capacity	WST:L	Waste Water Level
OIL:P	Oil Pressure	WST:CP	Waste Water Capacity
OIL:L	Oil Level	WST:L:1	Waste Water Tank 1
OIL:L:C	Oil Tank Center	WST:L:2	Waste Water Tank 2
OIL:L:P	Oil Tank Port	WST:L:3	Waste Water Tank 3
OIL:L:S	Oil Tank Starboard	WTR:T	Water Temperature
OIL:T	Oil Temperature		

Abbreviations Key

The *I-Command* gauge displays data from network connected NMEA 2000 devices as follows:

Display Category : Category Type : Modifier : Location /Instance

An example might be: FUL : RM : P, is fuel remaining, port tank.

Display category and an instance/location should always appear. Depending on the device one or both category type or modifier may or may not appear.

Display Category	Abbreviation	Category Type / Modifier	Abbreviation	Location / Instance	Abbreviation
Air	AIR	Absolute	A	Port	P
Alternator	ALR	Capacity	CP	Center	C
Altitude	ALD	Current	CU	Starboard	S
Atmospheric	ATM	Economy	E	Vessel	V
Battery	BAT	Flow	F	1	1
Black Water	BKW	GPS	G	2	2
Boost	BST	Ground	G	3	3
Coolant	WTR	Hours	H		
Cylinder	CYL	Level	L		
Depth	DPT	Load	L		
Economy	ECO	Oil	O		
Engine	ENG	Pressure	P		
Fluid	FLD	Range	RG		
Fresh Water	FRW	Rated	RT		

Display Category	Abbreviation	Category Type / Modifier	Abbreviation	Location / Instance	Abbreviation
Fuel	FUL	Remaining	RM		
Fuel Used	USD	Seasonal	S		
GPS	GPS	Speed	S		
Inside	IND	Temperature	T		
Intake	INT	Torque	TQ		
Live Well	LVW	Total	T		
Manifold	MAN	Trim	TM		
Oil	OIL	Trip	TP		
Outside	OUT	Used	U		
Paddlewheel	PDW	Voltage	V		
Pitot	PTT	Water	W		
Range	RNG				
Rated	RTD				
Tachometer	RPM				
Transmission	TRN				
Trim Tab	TTB				
Waste	WST				
Water	WTR				

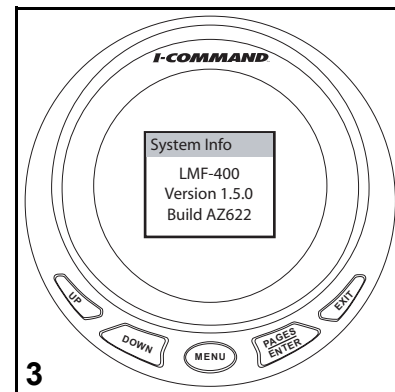
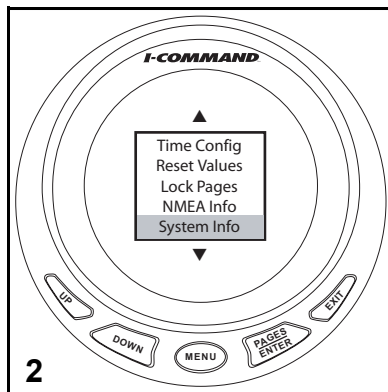
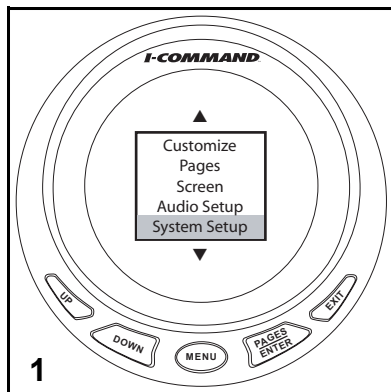
System Information

Use the following steps to view the *I-Command* gauge software information.

Press MENU.

1. Use the UP or DOWN buttons to select SYSTEM SETUP.
Press ENTER.
2. Use the UP or DOWN buttons to select SYSTEM INFO.
Press ENTER.
3. The system info is now displayed.

Press EXIT to return to Main display.



Product Warranty

BRP LIMITED WARRANTY FOR *EVINRUDE/JOHNSON* GENUINE PARTS AND ACCESSORIES SOLD IN THE UNITED STATES AND CANADA

BRP US Inc.* ("BRP") warrants its Evinrude®/Johnson® Genuine Parts and accessories ("Product") sold by authorized Evinrude or Johnson dealers in the fifty United States and Canada from defects in material or workmanship for the period and under the conditions described below. This limited warranty does not apply to Products not bearing the Evinrude or Johnson trademarks that are made by other manufacturers. This limited warranty extends to the original retail purchaser only ("Purchaser") and is not transferable to any subsequent owner. This warranty is available only on Products purchased as new and unused from a dealer authorized to distribute the Products in the country in which the sale occurred ("Dealer").

Aluminum propellers, plastic propellers, stainless steel propellers, Snap-In™ control cables and DuraTank™ fuel tanks are warranted for THREE (3) YEARS from the date of purchase as of July 1, 2006.

Powerhead assemblies are warranted for a period of SIX (6) CONSECUTIVE MONTHS from the date of purchase. All other Products are warranted for a period of TWELVE (12) CONSECUTIVE MONTHS from the date of purchase.

The following are not warranted under any circumstances: (a) normal wear and tear; (b) routine maintenance items including, but not limited to, adjustments, oil changes, water pumps, carburetor maintenance, spark plug replacements, etc.; (c) cosmetic damage or paint changes due to exposure to the elements; or (d) damage caused by: improper or lack of installation, maintenance, winterization and/or storage; failure to follow the procedures and recommendations in the Operator's Guide; removal of parts, improper repairs, service, maintenance, or modification; use of parts or accessories not manufactured or approved by BRP that are either incompatible with Product or adversely affect its operation, performance, or durability; repairs done by anyone, including Purchaser, other than an authorized Dealer; abuse, misuse, abnormal use, neglect, racing, improper operation or operation of Product in a manner inconsistent with the Operator's Guide; external damage, accident, submersion, water ingestion, fire, theft, vandalism or act of God; operation with fuels, oils or lubricants not suitable for use with Product (see Operator's Guide); rust or corrosion; or cooling system blockage by foreign material.

This warranty will be voided in its entirety and rendered null and void: (a) where Product has been altered or modified in such a way so as to adversely affect its operation, performance or durability, or has been altered or modified to change its intended use; or (b) where Product is or has been used for racing or any other competitive activity, at any point.

ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE LIFE OF THIS EXPRESS LIMITED WARRANTY. ALL INCIDENTAL, CONSEQUENTIAL, DIRECT, INDIRECT OR OTHER DAMAGES OF ANY KIND ARE EXCLUDED FROM COVERAGE UNDER THIS WARRANTY INCLUDING, BUT NOT LIMITED TO: expense for gasoline, expense for transporting Product to and from Dealer, removal of Product from a boat and reinstallation, mechanic's travel time, in-and-out of water charges, slip or dock fees, trailering or towing, storage, telephone, cell phone, fax or telegram charges, rental of a like or replacement Product or boat during warranty services or down time, taxi, travel, lodging, loss of or damage to personal property, inconvenience, cost of insurance coverage, loan payments, loss of time, income, revenue, profits, enjoyment or use of Product.

SOME JURISDICTIONS DO NOT ALLOW FOR THE DISCLAIMERS, LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR OTHER EXCLUSIONS IDENTIFIED ABOVE. AS A RESULT, THEY MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS, AND YOU MAY ALSO HAVE OTHER LEGAL RIGHTS THAT MAY VARY FROM JURISDICTION TO JURISDICTION.

Purchaser must bring the Product, including any defective part therein, and proof of purchase of the Product (original bill of sale) to Dealer promptly after the appearance of the defect and, in any event, within the warranty period. Purchaser must sign the repair/work order prior to repair to validate warranty coverage and must provide BRP/Dealer with a reasonable opportunity to repair/replace the defective part. All replaced parts become the property of BRP.

BRP's obligations under this warranty are limited to, at its sole discretion, repairing or replacing parts of Product found to be defective in material or workmanship, in BRP's reasonable judgment. Repair or replacement of parts will be without charge for parts and labor, at any authorized Dealer. No claim of breach of warranty shall be cause for cancellation or rescission of the sale of Product to Purchaser. BRP reserves the right to improve, modify or change Products without assuming any obligation to modify Products previously manufactured. If warranty service is required outside of the fifty United States or Canada, Purchaser will bear responsibility for any additional charges due to local practices and conditions including, but not limited to, freight, insurance, taxes, license fees, import duties, and any financial charges levied by governments, states, territories and agencies.

No distributor, Dealer or any other person is authorized to make any affirmation, representation or warranty regarding Product other than those contained in this limited warranty and, if made, shall not be enforceable against BRP. BRP reserves the right to modify this warranty at any time, being understood that such modification will not alter the warranty conditions applicable to the Products sold while this warranty is in effect. For assistance, please contact BRP US Inc. Consumer Support, P.O. Box 597, 10101 Science Drive, Sturtevant, WI 53177, 1-847-689-7090 or visit www.brp.com.

The Limited Warranty applies only to Products purchased as new and unused from a distributor or dealer authorized to distribute Products in the country in which the sale occurred.

Products purchased for commercial use, or used commercially at any time during the warranty period, are warranted for TWELVE (12) CONSECUTIVE MONTHS from the date of purchase. Product is used commercially when it is used in connection with any work or employment that generates income, during any part of the warranty period. Product is also used commercially when, at any point during the warranty period, it is installed on a boat that has commercial tags or is licensed for commercial use.

If warranty service is required outside of the country of original sale, Purchaser bears responsibility for any and all charges due to local practices and conditions that exceed or are in addition to customary charges in the country of sale, such as, but not limited to, freight, insurance, taxes, license fees, import duties, and any financial charges levied by governments, states, territories and agencies.

For assistance, please contact BRP US Inc. Consumer Support, P.O. Box 597, 10101 Science Drive, Sturtevant, WI 53177, 1-847-689-7090, or the affiliate of BRP Inc. where the Product was sold to the retail Purchaser.

No other change to the Limited Warranty shall be made or implied.

Effective as of July 1, 2008.

* In Canada, products are distributed and serviced by Bombardier Recreational Products Inc.

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

